UNIVERSAL LIBRARY
119 806
JNIVERSAL LIBRARY

© MCMLXVI, by Boston Music Co.
International Copyright Secured
Printed in U.S.A.

B. M. Co. 13389

FOREWORD

The practical benefits of the present attempt to offer some guidance in the harmonization of Chorales within the framework of the church modes presupposes not only familiarity with the principles of vocal polyphony, in the way that this discipline is set forth chiefly by Knud Jeppesen, but likewise with the concepts for the new major–minor Chorale harmonization. In the chapters that follow the presentation of this rather highly stylized technique is treated as briefly as the subject will permit.

Exercises in harmonization should be undertaken after each of the last five chapters, which give specialized suggestions for working within each of the five usable modes. Ample materials for this purpose are provided in a collection of authentic but largely unfamiliar melodies at the end of the book. The reason for giving these less well known melodies is so that the student can approach them without being influenced by his acquaintance with an already successful harmonization thereto.

P. H.

B.M.Co. 13389

TRANSLATOR'S PREFACE

The original Danish edition of this book ("Koralharmonisering i Kirketoneart", published by Aschehoug Dansk Forlag, Copenhagen) contains a few references to collections of Chorales that are entirely unknown and virtually unobtainable in this country.

However, because of their ready availability two collections are mentioned freely: Thomas Laub's "Dansk Kirkesang" (1918) published by Wilhelm Hansen Musik-Forlag, Copenhagen, and the generally accessible "Kirkengesäng 1608" by Hans Leo Hassler. Whenever these are referred to they are abbreviated *DK* and *Hs.* respectively.

H. N.

B. M. Co. 13389

CONTENTS

Introduction 7

Chapter I 18
Introductory Observations on
Fundamental Principles

Chapter II 25
The Chordal Material

Chapter III 32
Non-harmonic Tones

Chapter IV 36
Cadences

Chapter V 45
Typical Opening Motives

Chapter VI 50
The Ionian Mode

Chapter VII 59
The Aeolian Mode

Chapter VIII 62
The Dorian Mode

Chapter IX 67
The Phrygian Mode

Chapter X 69
The Mixolydian Mode

* * * * * *

Melodies for Harmonization 71

INTRODUCTION

The classical epoch for the harmonization of Chorales within the framework of the church modes and in that form which most nearly meets the modern practical requirements — namely, with the melody in the soprano of a four-part "note against note" arrangement — is relatively short. The most impressive monuments — the collections of Hassler, Praetorius, and Vulpius — all date from the first decade of the 17th century. As shortly thereafter as 1627 in a comparable work, Johann Herman Schein's "Cantional", one soon discovers that in spite of a certain dependence upon the church modes (which is still conspicuously in evidence) so much "modernism" has crept into the voice-leading and the resulting harmony that the decline of the older and purer style is surprisingly noticeable.

However, insofar as the three above named "classicists" are concerned, the student is confronted by numerous problems of both practical and pedagogical considerations. And here it must be pointed out at once that at the beginning of the 17th century Chorale harmonizations were designed solely for vocal performance and not, as modern usage dictates, also with respect to their effect when played on the organ. Amongst these specific vocal features come first and foremost the crossing of parts and certain forms of the melisma. Then, especially in Hassler, the widespread use of cross relation; and finally, the frequent occurrence of incomplete triads without the third. These characteristics are immediately apparent even upon first acquaintance with the great Protestant Chorale harmonizations of this very brief period.

It is also to be noted that even if the older style of harmonization tends to fall into disuse from and with Schein, it can already be observed in works of the above named triumvirate of earlier masters, as well as in those of their more important contemporaries, certain phenomena that can be accepted as more or less significant signs that old ways are being relaxed and that progress is being made in the direction of a new style. In this connection can be mentioned specifically a certain freedom in the treatment of dissonances, in the melodic intervals within the inner parts, in the use of accidentals, etc.

Exactly what these new tendencies imply — in a sense, symptoms of decay — may in our day seem a little obscure since from the present academic point of view one may quite easily fail to catch the significance of it all. Does it happen that prior to a given historically identifiable idiom as, for instance, that which evolved with the early 17th century Protestant masters, that stylistic correctives are adopted which have emerged from the practices of a still earlier generation? It can be asked whether the result of such a process will not be a "cleansed" rather than a "pure" style — a sort of idealization without, perhaps, any genuinely historical validity.

From this point of view the very existence of the four-part Chorale form (i.e. with the melody in the soprano supported by a "note against note" harmonization) may seem to suggest that to a considerable degree this style may be viewed as the fructification of the "modern" strivings of that day. These endeavors which had their origin in Italy as early as 1500 would by degrees lead to a stylistic revolution by 1600 — monody, chords, general-bass, major–minor tonality, etc.

To see it as clearly as possible, if we look to the Protestant repertoire as originating in the "pure" church style of the Netherlands-Palestrina tradition, it will be necessary to approach it by way of Joh. Walther (1524), Rhaw (1544), and Goudimel (1572); that is to say, with an eye on the contrapuntally imitative texture with the tenor Cantus Firmus. But, if we seek what is for us the more utilitarian form, we shall have to look forward to 1600 when the high noon of the contrapuntal church style was already past.

This apparent paradox becomes solved the moment it is clear that the above mentioned symptoms are merely symptoms, and nothing more. The real foundations for the style of Hassler, Praetorius, Vulpius, and their contemporaries lie in the continuation of those of the 16th century and its principles of tonality, harmony, and voice-leading which can now be understood as an ever constant and permanent norm. The various changes, mostly resulting from the surrender of certain time-honored practices, that one so frequently encounters are to no degree stylistically integrating. As such they can be given serious consideration only when they occur consistently, or at least with considerable frequency, when essentially the same circumstances involve harmonies or voice-leadings which apply exclusively in certain instances. It must be noted that actually a good many of the harmonizations that have come down from this period are in full conformity with the stylistic norm of the 16th century[1]. Thus it can hardly be called a striving against history to put on the statute books such departures that occur especially often and with more or less regular usage, and thereby actually bring into being the projection of a new style.

There can hardly be any doubt that there are considerations similar to those cited above that have determined the character of contemporary standards of Chorale harmonizations such as are found, for example, in Thomas Laub's "Dansk Kirkesang" (1918). Not only has Laub in his harmonizations consistently avoided all conflict between the organ and the vocal idiom, but he has just as assiduously shunned whatever is in conflict with the 16th century church style in the light of his deep knowledge of it.

For that reason the following exposition of harmonic practices within the modal framework are not, in the main, based upon the principles demonstrated in *DK*, although a comparison with the classical sources is often given. This is especially true of such instances in Laub wherein one can see unmistakably the texture of a newer harmonic technique.

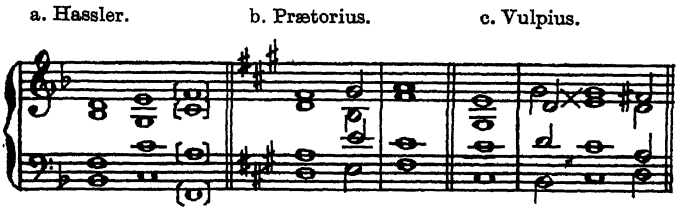
The illustrations that follow provide a limited assortment of the most frequently found "vocalisms" and stylistically unusual voice-leadings which, as a rule and with but very few exceptions, do not occur in *DK*.

[1]) One can point to the following harmonizations of Hassler: *Hs.* No. 6, 10, 14, 16, 17, 18, 50, and many more by Praetorius and Vulpius. It is to be observed that "vocalisms" such as voice crossings and melisma are by no means alien to this style, although in reference to contemporary organ writing the departure therefrom may appear to have gone a long way.

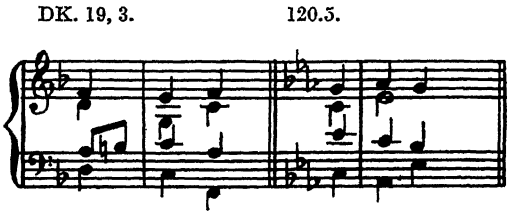
I. VOCALISMS

1) *Crossing of Parts*

Ex. 1



When played on the organ, illustrations a. and b. above, due to the crossing of tenor and alto, give the effect of parallel 5ths and 8ves with the bass. In c. the alto crosses above the soprano. In *DK* there are only two comparable instances: No.19, measure 3, where the crossing of parts is heard as such even on the organ because of the tenor line passing through the leading-tone (A-B-C) and in No. 120, measure 5, where the crossing produces the effect of repeated 3rds in the tenor and alto. These are quoted below in Ex. 2.

Ex. 2

2) *Melisma*

Ex. 3

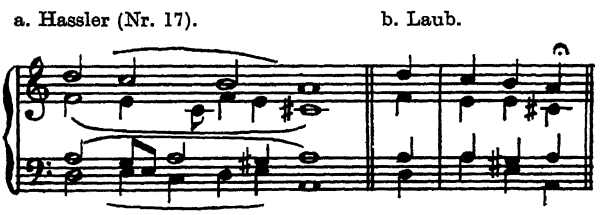
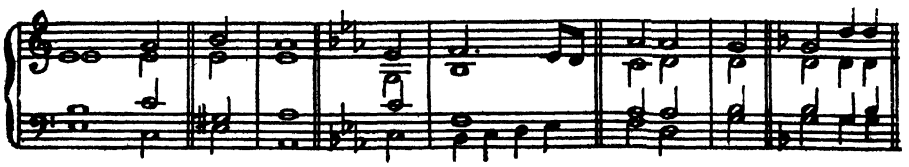


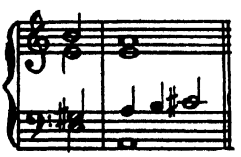
Illustration a. above, which is flexible and effective in choral performance, tends to become garbled when played in the proper tempo on the organ. In *DK* this is changed to the much simpler chordal form given in b. (cf. No. 83, bar 2).

3) *Incomplete Chords*

It is certainly doubtful whether this effect, which appears not only at the beginning and end and at the close of a line (i.e., at the fermata) but in many other contexts as well, especially in the music of Praetorius, has a basically vocal origin. Nevertheless, such incomplete chords do sound

better in the choir than on the organ. It is more likely that this is an archaism, a holdover from an earlier period, when the 3rd was considered to be a discord or at best less of a concord than the perfect intervals. In the time of Palestrina, when in more than two parts the fullest possible harmony was considered ideal, incomplete chords occur very seldom except as beginning, intermediate cadential, or closing effects. While instances such as illustrations a. and b. below can be accepted as entirely legitimate in the 16th century and also as counterparts thereto (although somewhat more exceptional) in *DK* (cf. Nos. 78 and 190, anacrusis; also No. 177, measure 4 at the fermata), cases like those at c., d., and e. have an unquestionably archaic stamp and cannot be considered so much with a view to their effect on the organ, but rather from the standpoint of the generally successful vocal sound which they produce.

a. Prætorius. b. Prætorius. c. Prætorius. d. Prætorius. e. Vulpius.

Frequently used, especially in the closing chord, is an ascending passing-note from the root to the third. This is also relatively common in *DK*.

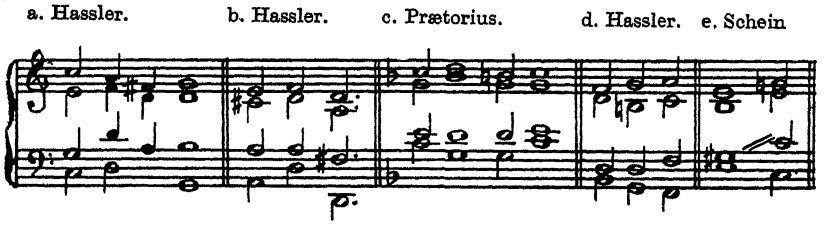
Ex. 5

Cf. b. in Ex. 4 above.

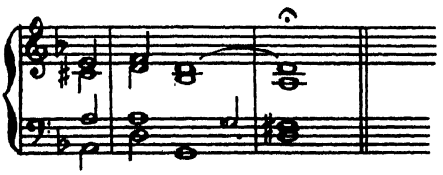
4) *Cross Relation*

This device, which in the harmonic-tonal instrumental music is used only conditionally, finds within the vocal modal music far wider usage, and not only at a "dead" interval (i.e. between the end and beginning of phrases) but, so to speak, at virtually every conceivable situation. This effect, which (see Ex. 6) has its origin in the melodic design of the separate parts, is definitely vocal and should be generally avoided in harmony designed primarily for performance on the organ except at a "dead" interval. This conforms to the practice in *DK*.

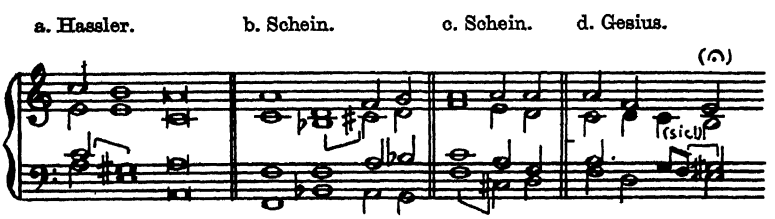
Amongst the celebrated Protestant masters of around 1600 cross relation is to be found most often in Hassler and only somewhat more rarely with the others, although too often to be considered as exceptional. Cross relation comes about in "variant" form (minor–major thirds within the same

triad as in illustrations a., b., and c.) as well as in the "mediant" form, that is, in two major triads whose roots are a 3rd apart as in d. and e. below.

Ex. 6

The voice-leading oriented thinking underlying the first four illustrations in Ex. 6 is clear enough. The raised third serves either as leading-tone (in illustrations a., b., and d.) or to produce a major closing triad (as in b.). The non-raising of a third is dictated by the descending movement after the ascending as in illustration d. in conformity with the chordal point of view; i.e., a pure rather than a diminished triad. Illustration e., with the leap of a diminished 4th in the tenor, may well be considered as being stylistically decadent. In *DK* situations such as b. above are often extended by a plagal cadence.

Ex. 7

II. STYLISTIC DEVIATIONS

1) *Dissonating Melodic Intervals*

Ex. 8

While voice-leading situations such as the tenor leap of a diminished 4th and the augmented 2nd in the alto in illustrations a. and b. respectively could have been avoided by a change in doubling in either the first or second triad of the progression, that in illustration d. (Gesius, 1605) is of a more complicated nature. To make the tenor 8th-notes 'G-sharp – F-sharp' would bring about a clash with the sustained 'F-natural' in the

soprano, while the closing chord requires the raised third, 'G-sharp'. Thus, the augmented 2nd, 'F-natural – G-sharp', appears to be completely intentional!

2) *Free Treatment of Dissonances*

Ex. 9

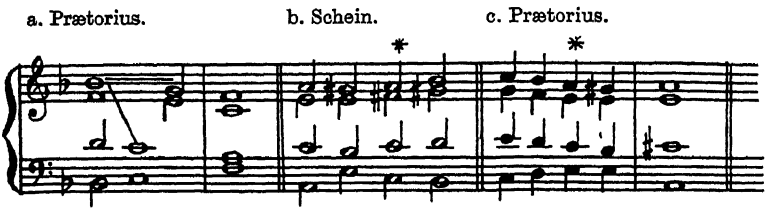
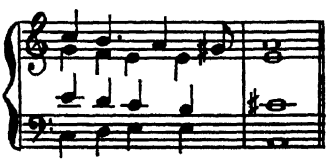
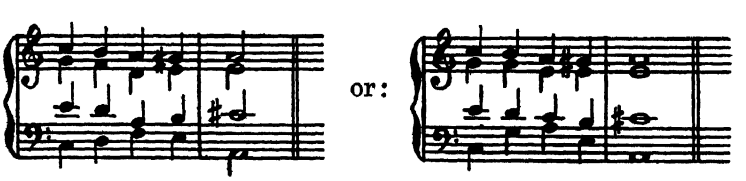



Illustration a. employs a variant of the suspension wherein the resolution is by leap; while b. features an augmented 4th vertically in what amounts to a diminished triad in the six-four inversion. In illustration c. is anticipated, and only so by Praetorius, the familiar cadential six-four formula of a later period, and is the outcome of a rhythmic simplification of the following cadential syncopation that is so typical of vocal polyphony. (Cf. Ex. 3.)

Ex. 10

When the simple quarter-note rhythm of illustration c. in Ex. 9 is kept intact, the normal modal harmonization would be one of the following.

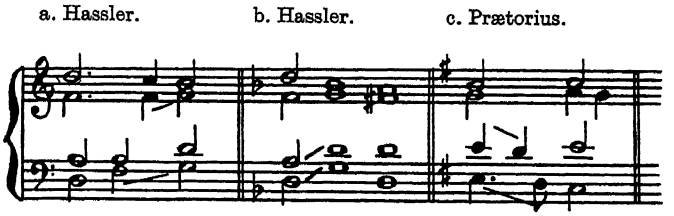
Ex. 11



3) *Exposed Consecutive Octaves and Fifths*

These effects can hardly be said to represent a rarely used license amongst the masters of this period, even the greatest. Of the examples given below, a. and b. cannot be thought of as originating in any voice-leading considerations, but rather may be taken as a sign of decadence (or possibly even carelessness?). Illustration c. could scarcely merit academic approval in view of the 7-8 suspension in the two lower parts created by the dotted note in the bass.

Ex. 12

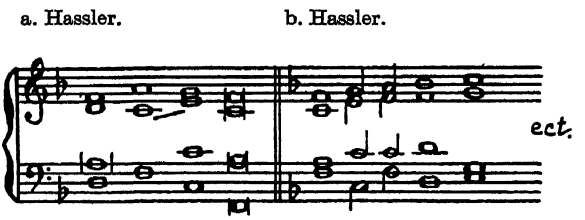


Only one instance of consecutive fifths is to be found in *DK:* No. 115b, measure 10, which can be defended on the basis of the melodic movement in the alto.

4) *Ascending Leap to the Leading-Tone*

This is certainly not a characteristic device of the strict style, at least not until at the cadence (see a. below). However, it does occur with some frequency, especially in Hassler and Praetorius. As part of an ascending melodic line such a leap can hardly be subject to criticism.

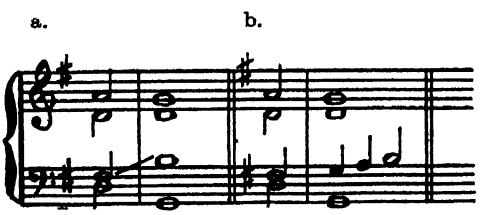
Ex. 13



5) *Ascending Leap from the Leading-Tone*

An ascending leap of a 4th from the leading-tone to the third of the terminal I triad, thereby effecting the change from open to close harmony, is encountered with some frequency in the works of the 16th century composers, as in illustration a. below. It seems to derive its validity as a means of avoiding the banality of the previously shown ascending scalewise passing-note (cf. Ex. 5) from the root to the third in the tenor within the terminal I triad, as in b. below.

Ex. 14

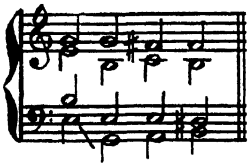


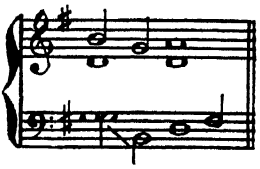
In *DK* there is only one such leap: in No. 109, measure 2.

6) *Descending Leap of a Sixth*

The descending leap of a 6th, major as well as minor, occurs commonly first with Schein (1627), as in a. below. In the older repertoire there is only one instance, in Eryträus (1608).

Ex. 15

a. Schein.

Ex. 16

Eryträus.

7) *Other Irregularities*

Ex. 17

a. Hassler. b. Hassler. c. Hassler.

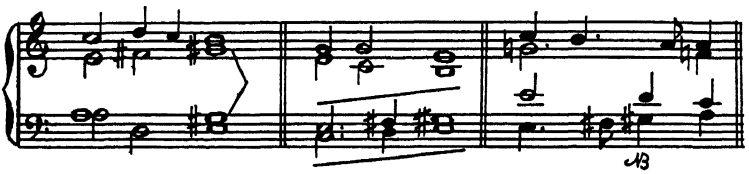



Illustration a.: doubling of a chromaticized note in order to avoid consecutive 5ths; b. parallel major 3rds ascending by whole steps in spite of the tritone relationships between the two voices is quite common in the Palestrina style (cf. Jeppesen: Counterpoint, page 100), and also occurs often in the works of the Protestant masters. However, three such 3rds in succession appear to be the exception. In *DK* even two such parallel major 3rds are extremely rare, apparently because such tritone relationships come through more conspicuously on the organ than in voices. Illustration c. shows a kind of delayed cross relation, whereby 'G-natural' in the alto and 'G-sharp' in the bass sound, but do not strike, at once; and with a diminished 5th in the bass and tenor. This must be regarded as an exception resulting from forced linear writing.

* * * * * *

The conditions surrounding accidentals in the music of the Protestant masters around 1600 present the analyst of our day with numerous problems that are due largely to what may well be considered carelessness on the part of the composers at that time. This is true not only of those under discussion here, but of the composers of vocal polyphony as a whole.

While in that day the indications for raised and flatted notes were not followed too consistently, it does not follow that the composers themselves were confused about this matter. Quite the contrary is the fact because there were such hard and fast rules for the use of accidentals and such a general knowledge thereof, that we can rest assured that no errors or deviations were made in this direction in spite of the sometimes seemingly haphazard notation.

As for these practices we are today quite reliably informed through the surviving theoretical treatises so that any doubts concerning the use of accidentals even in Palestrina's music need arise in only a very few instances. With reference to the 16th century practices in the matter of accidentals see Jeppesen: Counterpoint, pages 71–72.

The Protestant masters at the beginning of the 17th century followed on the whole the practices of the preceding period in respect to accidentals, but in certain situations one can observe the influences of the new period. This is not so much in the failure to indicate accidentals accurately (which seems with certain exceptions to have the same background as with the older masters) as — in contrast — with the indication of accidentals, where in view of the stylistic features, one would normally not expect to find them. An assortment of illustrations follows.

Ex. 18

a. Vulpius. b. Schein.

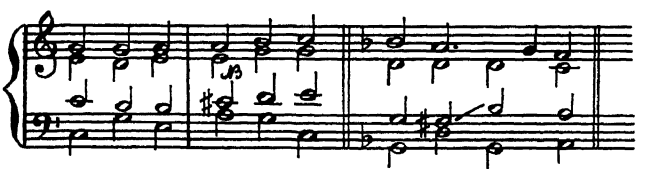
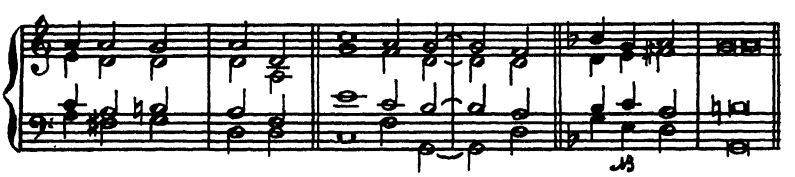



Illustration a. occurs relatively often in Vulpius. The other composers of that day consistently use the minor 3rd in comparable situations, which is more in keeping with the newer concept of harmony, and this is also the general practice in *DK*. In b. the sharp results in a diminished 4th leap (decadence!).

The custom, especially in the Dorian mode of singing 'B-natural' in ascending (A-B-C) and 'B-flat' in descending (C-B-flat-A or D-B-flat-A), and in an upward melodic are 'B-flat' (A-B-flat-A or G-B-flat-A) while 'B-natural' in a downward are (C-B-C or D-B-C) seems on the whole to have retained its validity for the composers of the 17th century; and in those circumstances where 'B-flat' seems to occur indiscriminately, in spite of the lack of definite rules, it is quite safe for the most part to consider these on the basis of careless notation. Thus, we cannot be absolutely sure that the following quotations are correctly notated.

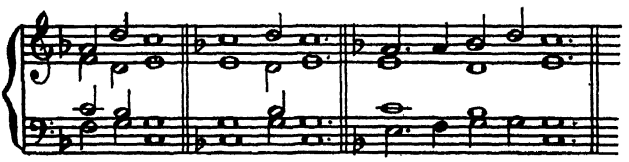
Ex. 19

a. Mareschall (1606) b. Prætorius. c. Prætorius.

In a. the composer has even inserted the natural sign (superfluous since the mode is Dorian), which implies that the B-flat is definitely not desired — rather strange since a tritone is outlined melodically in the tenor to

the 'F' in the last chord. The possibility of a typographical error (natural instead of flat) seems therefore to be not unlikely. Illustration b.: here one could justify both possibilities, although 'B-natural' seems the more probable because the descent from 'E' to 'B-flat' would too strongly outline the tritone. In c. the doubling of the bass in the ascending line precludes the possibility of using 'E-flat' because of the resulting augmented 2nd.

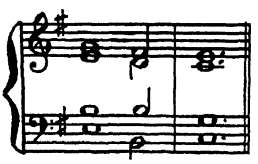
The raised leading-tone at the cadence is generally notated with great care when it concerns 'B-flat' or 'B-natural'. When, however, it might be lacking one can in most cases proceed on the basis that it is due either to simple carelessness or to typographical omission. But there are also exceptions to this rule which are shown in the following illustrations.

Ex. 20

a. Hassler. b. Hassler. c. Hassler.

In a. one can dare to assume, probably, that the natural sign for the raised third was forgotten; but at b. the situation is more doubtful in that while a leap to and/or from the leading-tone is not entirely unusual (cf. Ex. 13 and 14), it is generally assigned to the alto and not to the tenor where it is more conspicuous. How the cadence can come about with the intentional bypassing of the leading-tone is illustrated rather simply at c. (where the 'B-flat' is a melody note), but the instances of it are not much more than what is shown here and it appears that this effect does not appear outside of Hassler's works.

In contrast hereto the deceptive cadence without the raised leading-tone is not entirely unknown, as in Ex. 21.

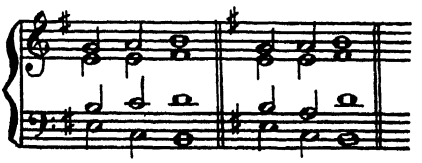
Ex. 21

Melchior Franck.

The doubling of the root in the closing VI triad precludes the possibility of the raised leading-tone. (Actually, these three chords constitute the progression VI—III—IV in G major.)

The raising of the third in a minor triad at the end of a stanza is an unavoidable rule and is followed consistently. It is more a matter of choice at the intermediate cadence at the close of a line. When in such cases the chromatic signs are lacking, it would be bold indeed to assume that they are to be understood. It is certainly not out of place stylistically to insert

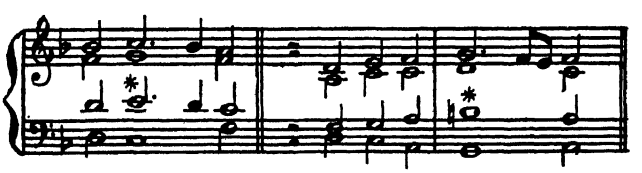
them, but they can also be omitted for artistic reasons (cf. *DK*, No. 19, line 3 (5) ; No. 98, line 2; No. 158, line 1; as well as other instances).

At the half cadence on the V this style usually requires a major triad. Where the chromatic sign is missing in such cases it is generally safe to conclude that it was forgotten. However, this is not invariably true. In the following quotations from Praetorius (in whose works it is not infrequent), which are variants of the cadential formula I—IV_6—V the raising of the third would be impossible.

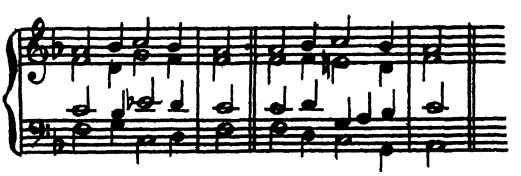
Ex. 22

The form is decidedly weak — archaically indefinite — and certainly not to be recommended.

Were it constructed within the Ionian framework the leading-tone would then be the culminating point in a figure, being absorbed quite naturally in the minor 7th, especially when it occurs in the tenor and would thereby unavoidably cause a tritone to come about. While Hassler pays strict attention to this matter and in only one instance (see a. below) neglects to insert the flat, the other masters of this period are hardly as consistent. In Schein there occurs a further instance (see b. below) where he inserts an unnecessary natural by the "B" — the tritone notwithstanding — and thereby, in a sense, contradicts himself. Upon singing this with a 'B-flat', one can well be tempted to wonder whether the natural sign might not be a typographical error.

Ex. 23

a. Hassler. b. Schein.

In *DK* the raised leading-tone is quite consistently avoided; therefore, either as a. or b. below.

Ex. 24

a. b.

CHAPTER I

INTRODUCTORY OBSERVATIONS ON FUNDAMENTAL PRINCIPLES

When in respect to Chorale arrangements in the church modes is used the term "harmonization", this is correct only to a degree. By "harmony", as used in our day, it is implied that there exists a certain pre-established unity — a sort of "vertical fusion" — in addition to which for every given chordal situation there is a stylized and rather inflexible set of functions within a tonality, such as Tonic (I), Dominant (V), and Subdominant (IV) and their respective substitutes. The authentic cadence, in its most elementary concept (I—IV—V—I), is a sort of trademark of the style and is to be found in numerous variants to meet virtually every harmonization problem.

Insofar as these unified chord formations are concerned, they generally appear under fixed circumstances as derived from the orderly sequence surrounding each function. But, it must also be said that there is a not unimportant "horizontal" view that must be taken into consideration so that the individual voice parts resulting from the harmony will not be too uninteresting in design, although the craftsmanship, from the academic point of view, lies largely in the harmonies as such.

But, for the system of harmony within the church modes to the extent that it has validity within that style, which is the subject of the present observations (that is, concerning the Protestant Chorale arrangements at the beginning of the 17th century), the situation is essentially different and from a particular point of view even the opposite. To express this difference briefly and categorically it might be said that in harmonic music the point of departure lies in the "vertical" chords while in the modal church music it lies in the "horizontal" voice-leading. This can be argued from an idealistic standpoint, but hardly from a realistic and practical one. A one-dimensional harmonic or linear conception has never figured into the art of multi-voiced writing. Apart from the extreme boundaries of this long period of history, the "absolute" linear approach is found only in the early middle ages (Ars antiqua), and the "absolute" harmonic concept only in the late romanticism and impressionism at the close of the 19th century. Except for these two extremes, each period has had to fight its own battles in the solution of the problems connected with multi-voiced music on two fronts; that is, in respect to both dimensions — linear and chordal. The matter can be discussed in terms of "more or less", but not as "either-or".

And the very minute segment of time around 1600 presently under investigation is the transition, historically speaking, between the modal church polyphony and the major-minor harmonic concept. It is therefore a prerequisite to an understanding of the style of the Protestant Chorale

arrangement to keep clear in one's mind not only how it differs from the harmonic music, but also what it has in common with it.

To begin with the common features, it must be pointed out at the very outset that, as a matter of fact, even within the vocal polyphony the simple phenomenon of several voices singing at once was considered not so much the product of voice-leading as — even at the beginning of the 16th century — the expressed tendency when more than two parts are involved to employ voice-leadings for the purpose of achieving the complete triad and its first inversion, the chord of the 6th. This is to say that the very principle of chord formation that provides the foundation of the later major–minor harmony is even here conspicuously in evidence. And the nearer we get to 1600, the more active is the development process of stabilizing simultaneously striking concords into triads. This development, which even at that point in history was taking place within the domain of the church modes, was no less favored in the general tendency towards "note against note" writing at the expense of contrapuntal imitation, which becomes more strongly felt the closer we come to 1600. Consequently, the settings unavoidably take on the characteristics of the "vertical", that is the chordal, while to the same degree the craftsmanship of pure contrapuntal lines diminishes, even to the extent of becoming subordinate in respect to the chord formations.

What now concerns the Protestant composers around 1600 is that the harmonization is based chiefly upon the chordal "note against note" principle, the emphasis being consistently upon the stark simplicity of the voice-leading, a matter that will be treated more fully shortly. This simple voice-leading is hardly mentioned beyond that of a subordinate contrapuntal structure to support the given melody (the Chorale serving as Cantus Firmus), but of primary importance is the chordal foundation underlying the formation of the melodic line in the soprano.

In all justice it can still be said about the Palestrina style that its origin lies chiefly in the line, and that the chordal aspect is not of primary interest. But, the same cannot be said of the Protestant church melodies as they are treated by a Hassler, a Vulpius, or a Praetorius. Here it becomes "harmonization", with the limitations given at the beginning of the introduction to this chapter and with those which are to follow.

In much the same way, the Chorale style of the period around 1600 is related to that of the following period. In the meantime, if we examine more closely the nature of the Protestant masters' harmonizations and their principles in relation to those of later composers their important and far-reaching differences also will become apparent. These differences are first and foremost found in the principles of tonality — church modes vs. major–minor.

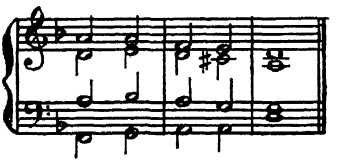
The harmony arising out of the church modes was even in the time of Hassler and Praetorius relatively without the element of "function", as applied to categories of chords in our day. They certainly recognized, as already mentioned, the triad and its inversion to a chord of the sixth[1]. In addition, the chord of the seventh was used, although very seldom and only on the supertonic and often in its first inversion, $\frac{6}{5}$, before the caden-

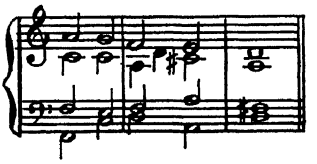
[1]) The $\frac{6}{4}$ was never used as a chord as such, but merely as ornaments to a root position triad on the same bass note and strictly in accordance with the rules for suspensions.

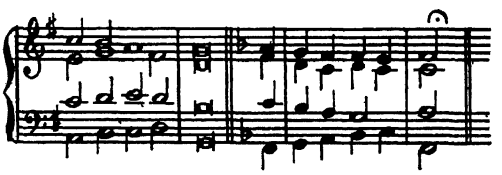
tial dominant. But all these chords were still used on more or less the same basis without any genuine consideration of their relative importance, which is one of the principal characteristics of functional major–minor harmony as is shown by the conventional grouping of triads into "primary" and "secondary" classifications.

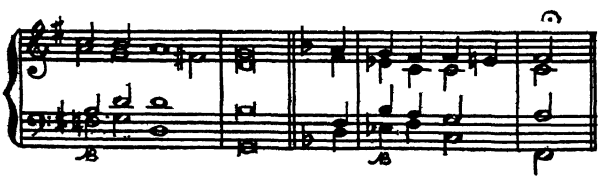
But with certain reservations (which can be viewed from the historic situation which dominated the transitional movement), a dawning awareness of harmonic function makes itself felt more or less clearly here and there, but to a greater degree temporarily only at the cadence, in the V—I relationship with the raised leading-tone. However, so powerful a harmonic foundation as is characteristic of major–minor music is encountered only very rarely.

While the harmonic music in general stresses unambiguous purposeful harmonic preparation of the cadence, thus

Ex. 25
D minor

the same melodic situation would most likely be treated modally as follows.

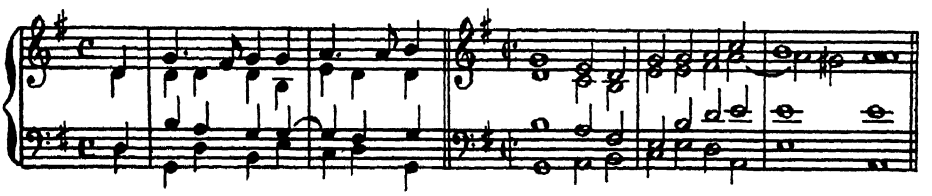
Ex. 26
D-Dorian
(or with a firm 'B-flat', D-Aeolian)

Even in the Ionian mode, which is identical to the major scale and is also similar to it in the matter of cadences, one not infrequently encounters the more tonally definite cadence forms such as

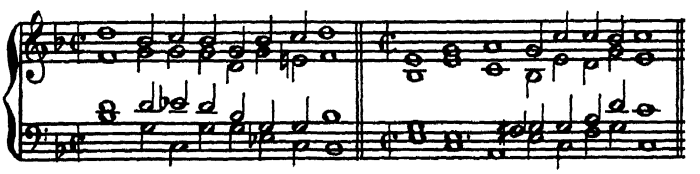
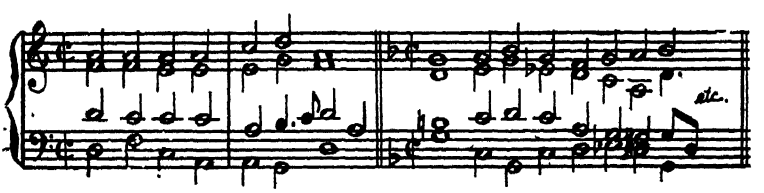
Ex. 27

used to advantage over the more ambiguous forms such as the following, with the Mixolydian colored VII on the subdominant or its substitute.

Ex. 28

The same is likewise true in all of the modes in approaching a cadence from the second to the first degree. Such situations never — or at most only very seldom — give the effect of a genuine modulation, but rather more often a momentary lingering on the second degree of the scale.

The aura of tonality is perhaps most clearly apparent in relation to the tonic triad, the position of which from early times has been so central in the conception of harmonic-tonal music. While it is a fairly hard and fast rule (one that is strengthened by the existence of only very few exceptions) that the cadence of a Chorale line is on the tonic, the beginning of the line — especially in the Dorian and Phrygian modes — is often the triad on the second degree. And, even in cases where a line begins on the tonic, it is found only seldom — in contrast to the common practice in harmonic music — brought in a tonal relationship to the other chords. And even when this does happen occasionally, it is in any case hardly with a consciously conceived working.

A comparison of the two following beginnings, the first in the harmonic key of G major and the other modal (G-Ionian), will demonstrate more effectively than words can explain how these differences come about.

Ex. 29

In this connection is provided in Ex. 30 a small assortment of beginnings, some with triads other than the tonic and others with the tonic, but in the latter case an immediate weakening when heard with "harmonic" ears.

Ex. 30 a. (Hassler). b. (Hassler.)

c. (Prætorius). d. (Hassler).

Ill. a.: g-Dorian: III—I—IV—I—I—VI—IV—III

Ill. b.: a-Aeolian: V—III—I—V + cadence to the Ionian

Ill. c.: d-Dorian: I—III—VII—V—V—IV—I

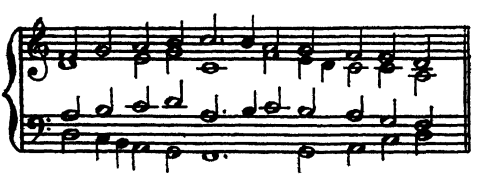
Ill. d.: g-Dorian: I—IV—I—IV—V—IV_6—V—I

This purely non-functional use of triads is underscored, or further strengthened, by the use of accidentals (cf. Ex. 17–24) which often appear in combinations that are unknown in the harmonic music or, conversely, lacking where the listener with newer concepts is accustomed to expect them. To this end the above illustrations are pertinent, especially the last two.

Illustration c. employs the plagal cadence preceded by a dominant triad with a minor 3rd (not a leading-tone) and the subdominant triad with the major 3rd. This is absolutely the reverse of the normal harmonic conception. In d. the first two chords (tonic and subdominant) both have the major 3rd which likewise, to "harmonic" ears, produces a hovering feeling of tonality.

That these chords are not merely the chance result of the voice-leadings but have their own characteristic value, should be obvious after what is shown above. Only the consistent usage of one and the same form, the triad, makes any other understanding of it impossible. And that these purely vertical formations also are frequently used in the full consciousness of the chords as such, is hardly open to doubt. But it takes a Hassler with his many times over refined sense of harmonic color to make the fullest and most varied use of accidentals.

In spite of the lack of a common denominator comparable to the all-dominating authentic cadence in major–minor tonal music, all this so widely varied chordal material does not give the impression of so many isolated effects. This is so because of another kind of unifying force that has its being in the voice-leading. While this force may be considerably less active than the more varied rhythms and greater breadth of line that gives life to genuine polyphony, it is on the whole more genuinely melodic than in later harmonic music. While the quality of the melodic material varies from one composer to another, even amongst the most important masters the after effects of the old linear polyphony are still to be noticed. In this respect, too, Hassler stands above his contemporaries with his quite celebrated "elastic voice-leading", an example of which is given below, the penultimate line of "Wir glauben all an einen Gott", (*Hs.* No. 24).

Ex. 31

What becomes immediately apparent is the conspicuous, but free, contrary motion in the outside parts and the almost completely scalewise

motion in the bass. This is achieved largely through the frequent progression of root position triads on neighboring scale degrees. Such chord connections without any common tone is a characteristic feature of church modal harmony in contrast to the relative rarity of such progressions in major–minor harmony where for the most part roots leap either by 4th, 5th or 3rd with the resulting one or two common tones. Also noteworthy are the well contoured two middle parts which in a purely harmonic setting are apt to be treated as "filler" parts on the common tones or with repetitions of the same effects. This is often true of the alto especially. In Hassler both of the inner voices are characterized by the constantly fresh notes with genuine climaxes comparable to those in the soprano.

Except for the widespread use of non-related neighboring chords[1] it is preferable to concentrate on melodic voice-leading as seen from the modal concept because of the far greater choice of doublings within the root position triads and the chords of the sixth. Also, the modal style is far more liberal in the use of the doubled fifth and third and the less regular use of the common tone, which is generally of greater concern in the harmonic style. It seems fairly certain that such extraordinary doublings, when not in conformity with the new concepts of listening, are often used to avoid faulty parallels although in such cases the rules may actually contribute to better voice-leading.

The crossing of parts, especially in the two middle voices, quite naturally serves the same purpose. However, as already mentioned, this effect is quite restricted especially when the organ, as well as the choir, is taken into consideration. The following quotations from Hassler show these principles in operation.

Ex. 32

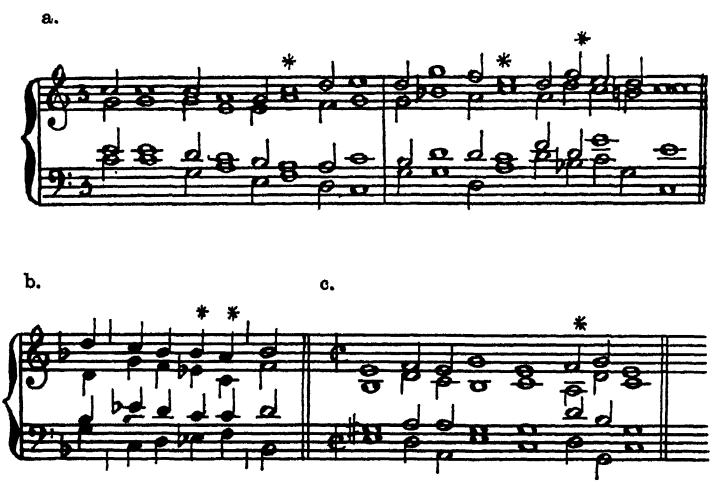



Illustration a., the first two lines of "O Herre Gott, dein göttlich Wort", demonstrates three instances of the doubled third, obviously done in order to bring about "fresh" notes in the alto as well as the impressive climax in the fourth chord from the end. Illustration b., the fifth line of "Hellft mir Gotts Güte preisen", shows an incomplete II^6_5 followed by a V with the

[1] For a complete table giving all possible chord relationships see Hugo Norden: Modulation Re-Defined (Bruce Humphries, Publishers, Boston), page 6.

doubled fifth. Were 'G-F' substituted for 'E-flat-C' in the fourth and fifth chords the results would be fuller harmonies, but at the same time the alto would lose its fine melodic balance and would then consist only of the notes 'D-G-F-G-F-F'. Also, the doubled fifth in the anacrusis chord appears to have a melodic significance: the ascending leap from 'D' to 'G' instead of the note repetition 'G-G'. Illustration c. employs crossings which result in an effective high point in the tenor and at the same time a well placed low point in the alto. In this form, however, it is effective only in pure vocal writing since in connection with the preceding chord this would sound like consecutive 5ths and 8ves on the organ (cf. Ex. 1).

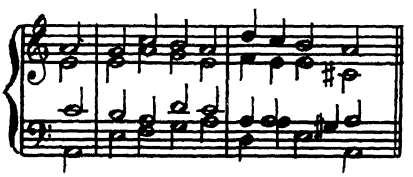
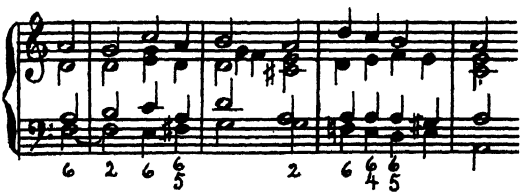
CHAPTER II

THE CHORDAL MATERIAL

The Triad: Root Position and in Inversion

The foundation for Chorale harmonization in the church modes is the consonant (i.e. major and minor) triad in root position. Even though the first inversion is by no means rare, the root position triad is considerably more dominating than in the later major–minor style. At most, the proportion of chords of the sixth to root position triads in a modal harmonization might be 1 to 3, but the average would run considerably lower. Complete harmonizations, even of Chorales having more than four lines, with only two or three chords of the sixth are not too unusual.

How widely different a modal setting and a purely harmonic treatment of the same melody can be in the matter of the proportion of root position to inverted triads is better shown by the following examples than by a detailed explanation.

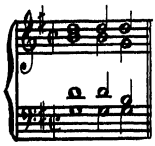
Ex. 33

(Schiørring, 1781)

Hard and fast rules for situations in which a chord of the sixth should be substituted for a root position triad naturally cannot be given. As in the harmonic style such decisions must be made in the light of the opportunities offered by the melodic line. As starting point it can only be said that the first chord of the Chorale, whether an anacrusis or accented, and the closing chord as well as the cadential chords of the intervening lines should be in root position. The beginnings of all lines, except for the first, may be with a first inversion triad, although when this occurs it is generally unaccented.

Definite rules for the rhythmical placement of chords of the sixth are

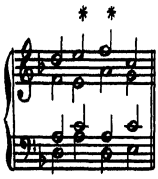
likewise not available, although there is a pronounced tendency to assign them to unaccented rather than accented beats.

As regards doubling, it has already been shown in the preceding chapter how in root position triads the third and fifth are doubled far more often than in major–minor music. However, more needs to be said about this matter. While the doubled third is not uncommon, the usage of the doubled fifth varies with different composers. Praetorius employs it quite often; Hassler and Vulpius much less, generally speaking, hardly more than once per harmonization. In *DK* it is reserved for rare occasions, probably only once per three harmonizations, which is more nearly in line with contemporary usage.

It would be well to investigate this somewhat thin device carefully and then use it only where it would materially improve the voice-leading. In our day, as previously explained, Chorale harmonization is primarily based upon organ performance, and experience shows that triads with the doubled fifth are less effective on the organ than when performed by unaccompanied chorus. The beginning of Praetorius' "Es ist ein Ros' entsprungen",

Ex. 34

gives a fine and airy a cappella effect, but on the organ it seems to be unfortunately unsuccessful. And, at the beginning of the second line of the same composer's "Menschenkind, merk eben" (1609),

Ex. 35



one might be inclined to prefer a more modern harmonization such as the following.

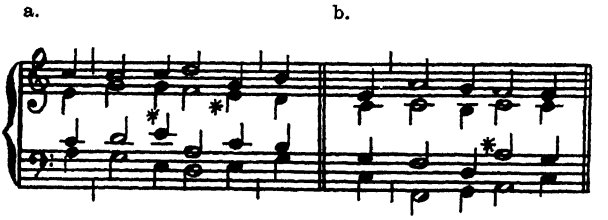
Ex. 36

While in root position triads (in spite of the abundant use of the doubled fifth and third) the doubled root is nevertheless in preponderance, the situation is reversed in the matter of chords of the sixth wherein the doubled root appears with notably less frequency than do the two other doublings. It is certainly true that the doubled third, which in the harmonic style is used only with some quite definite purpose, in the church modal style receives the most frequent doubling.

In 240 examined harmonizations, mostly by Hassler and Praetorius, there were 351 chords of the sixth with the doubled root, 471 with the doubled fifth, and 544 with the doubled third. In *DK* the situation is much the same.

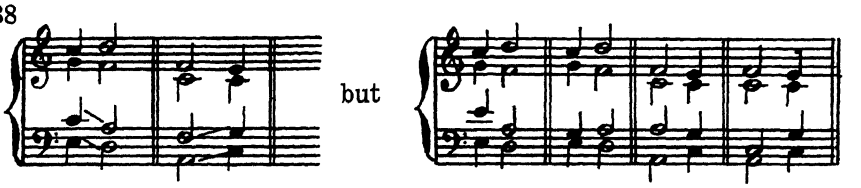
Again, the reasons for these doublings lie chiefly in the desire for more melodically conceived voice-leadings, a consideration that is not so active in the usual harmonic style. A few examples will serve to illustrate.

Ex. 37

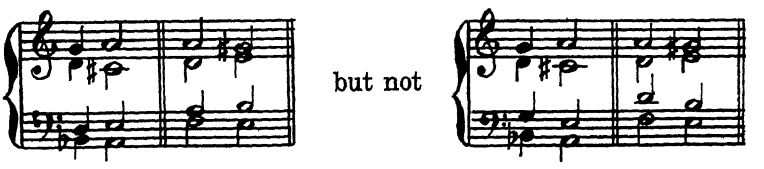


In a. the 'E' in the tenor provides an effective high point, while in the alto the second 'E' makes possible the descending scalewise line. If for these two notes the root or fifth were substituted, that is, either 'C' or 'G', the resulting individual melodic lines would be considerably weaker and lacking in design. In b. the 'A' provides the tenor with a correspondingly fresh high point.

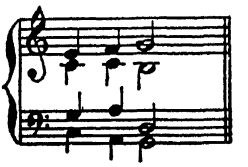
In these as well as in similar passages the matter of purely harmonic effect as such plays a certain part. The progression of a 6th to a 5th, with both voices either ascending or descending, is better avoided. Therefore not this,

Ex. 38

At the half cadence in the minor modes (Dorian and Aeolian) and at the final cadence in the Phrygian it becomes virtually unavoidable to double the fifth in the first chord of the progression.

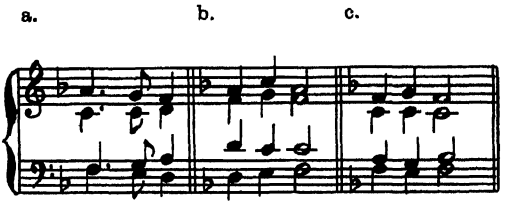
Ex. 39

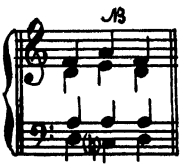


At the half cadence in major (Ionian) the doubled third can be used to advantage.

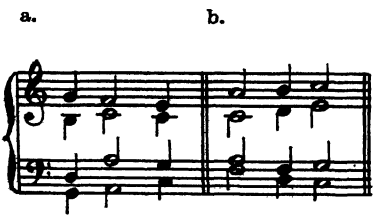
Ex. 40

At a chord of the sixth great care must be exercised in how it is approached and quitted in the bass. Whether the bass ascends or descends and whether the chord is accented or unaccented, one should only reluctantly leap either to or from it. *In other words, it should be approached and/or left by stepwise motion whenever it is artistically expedient to do so.*

(a) Stepwise to *and* from:

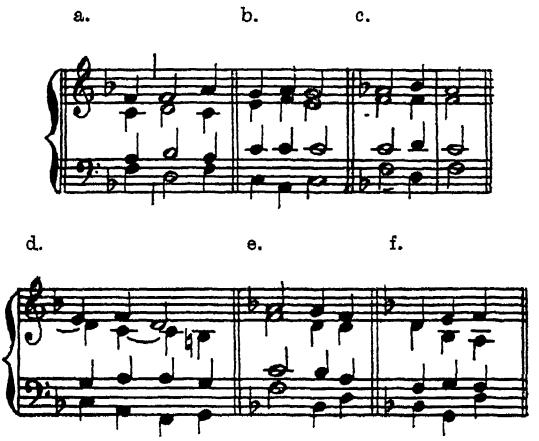
Ex. 41

It should be noted that where the chord of the sixth comes at the turn of a descending arc in the bass, as at c., it is without exception approached and left by semitone (I—V_6—I). Entirely foreign to the style is the following:

Ex. 42

(b) Approached stepwise and left by leap, and vice versa, such a leap seldom larger than a 3rd:

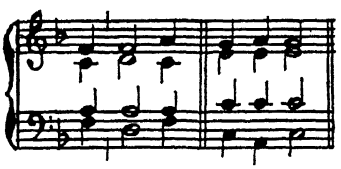
Ex. 43

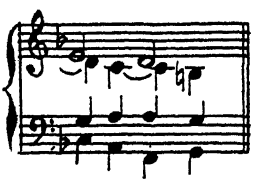


(c) Approached *and* left by leap (very rare) :

Ex. 44

It must be noted that in all of these situations the bass (i.e., the third of the triad) is doubled, which practice is consistently carried out in *DK*. In the classical repertoire one does encounter an occasional exception, but these are nevertheless so few that the doubled third in such cases becomes an established principle. A general rule covering such exceptional situations is indeed difficult to find.

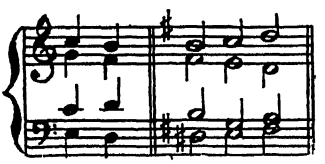
An element of doubt arises here whether a so consistently followed rule in respect to the doubled third in such chords of the sixth is always quite as it appears. One could be tempted to subscribe to the theory that what is shown in Ex. 44 may not be genuine chords of the sixth, but rather root position triads with a sixth substituted for the fifth. From this point of view a. and b. could be seen as voice-leading variants of,

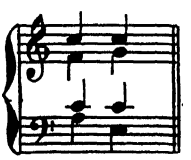
Ex. 45

and d. likewise of the following.

Ex. 46

Interestingly enough, both forms of d. are found in the same harmonization in *DK* No. 97, bars 14 and 6 respectively. In the meantime, it must stand

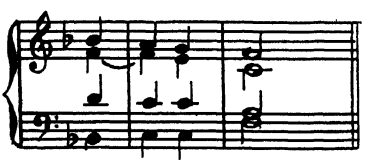
as an established principle that the doubling of the third as shown above is a matter of fact.

When two or more chords of the sixth follow in succession, the bass will invariably progress stepwise.

Ex. 47

In contrast hereto, a progression such as the following, while *never* used in the modal style, may be quite acceptable in major–minor harmony.

Ex. 48

The Six-Four Chord

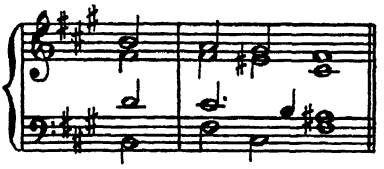
The six-four chord is employed most sparingly and only before the V in a cadence and with the 4th prepared and resolved according to the rules for suspensions.

Ex. 49

Exceptions are first encountered after the beginning of the 17th century, where the 4th entering without preparation is beginning to win ground (cf. Ex. 9 b. and c.).

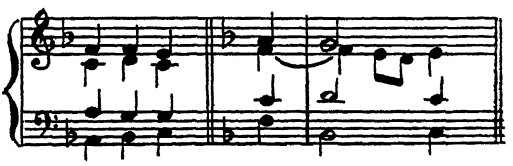
The so-called "passing six-four", even when unaccented (which is used freely in the harmonic style), is out of the question in the modal style.

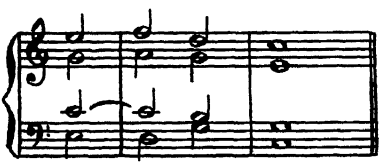
The Chord of the Seventh

Of the various chords of the seventh, the V^7 in its various forms is not used except when it is created on an unaccented beat by the descending passing-note from the root of the V to the third of the I.

Ex. 50

Far more general, however, is the suspension to the third of the V.

Of the remaining chords of the seventh only the one on the second degree is used, with the $\frac{6}{5}$ effect prepared and resolved according to the generally pertinent rules for suspensions.

Ex. 51

The chord of the seventh on the second degree occurs quite often in root position in Schein in the following form.

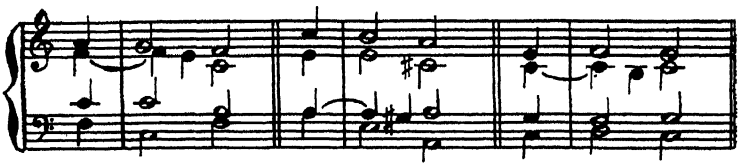
Ex. 52

This never occurs in the older masters, except for one single instance in Hassler. It is also consistently avoided in *DK* and is obviously out of place in the flowering of this style.

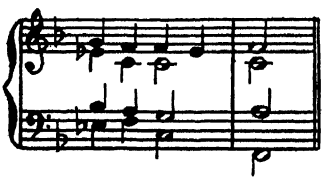
CHAPTER III

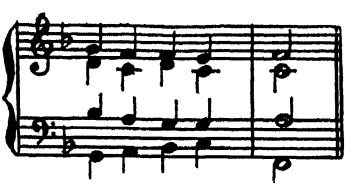
NON-HARMONIC TONES

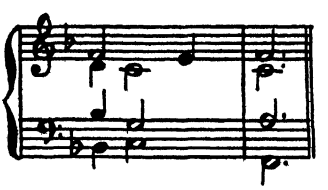
The Suspension

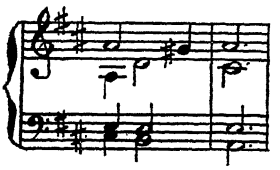
The suspension is generally treated in accordance with the rules for its use in vocal polyphony, and appears most frequently in the penultimate chord of the cadence in an inner voice as a 4th or 7th against the bass.

Ex. 53

In the melody before the leading-tone, a suspension sometimes appears thus,

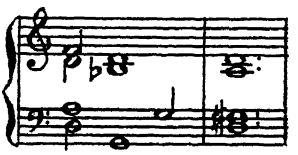
Ex. 54

but in the modal style this melody is more commonly treated with the $\frac{6}{5}$ chord on the second degree before the cadence.

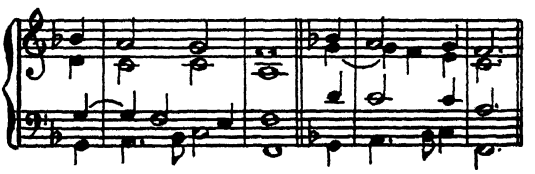
Ex. 55

In triple rhythm the suspension of the 4th is commonly used thus.

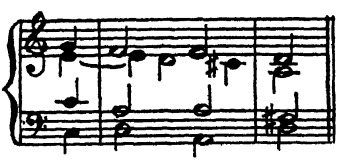
Ex. 56

The same melodic situation also makes possible the suspension of a 7th to introduce the VII_6—I progression.

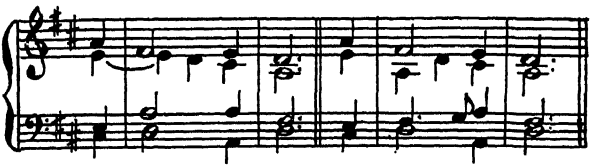
Ex. 57

This cadential formula is used only at the intermediate cadences, not in the final cadence.

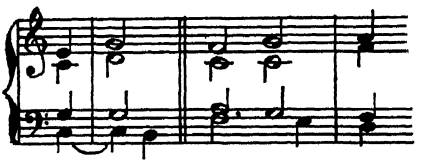
The 9th can occur as a suspension in the plagal cadence.

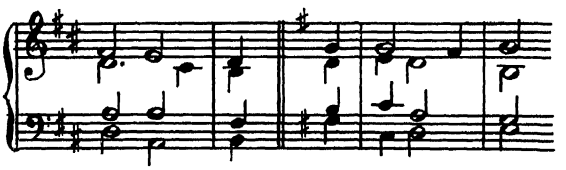
Ex. 58

Preceding the cadential V in the authentic cadence, the 7th against the bass (being also the 2nd below the melody) comes about so generally in the following melodic situations that the suspensions as shown below are virtually a cliché.

Ex. 59

Only very rarely is the 9th used in this way, and then as good as always in a minor triad where its resolution produces a minor 3rd against the melody.

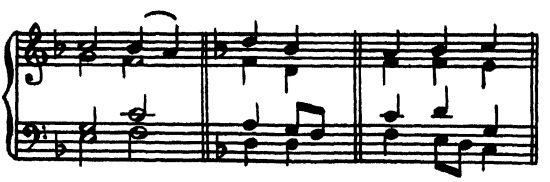
Ex. 60

It can occasionally be found in major, but as a rule a. below would be replaced by b.

Ex. 61

Suspensions in the bass, such as the following, are consistently avoided, even though they may be quite acceptable in vocal polyphony.

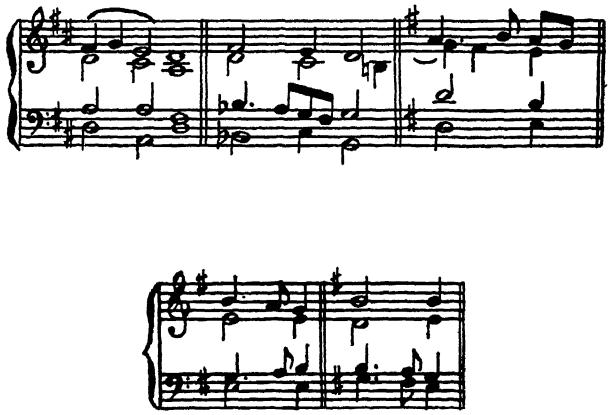
Ex. 62

Suspensions are never used at or near the beginning of a line, therefore the following or anything similar is not idiomatic.

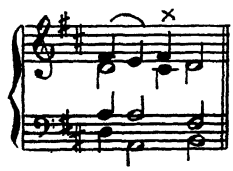
Ex. 63

The Accented Passing-Note

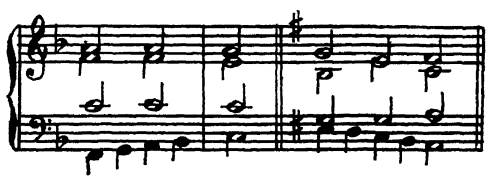
The descending accented passing-note can be used provided (1) it is half the length of the chord against which it sounds and (2) that a new line of text does not begin at that point.

Ex. 64

The Echappée, Auxiliary-Note and Unaccented Passing-Note

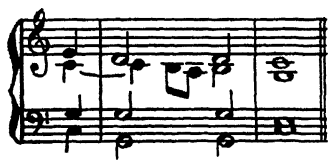
Essentially the same conditions that apply to the accented passing-note apply to the unaccented dissonances such as the échappée, auxiliary-note and passing-note.

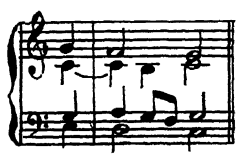
Ex. 65

The échappée can occupy a whole beat in melody forms such as the following.

Ex. 66

A 5th can be filled in by means of the two following passing-note figures — ascending and descending — in the bass.

Ex. 67

Longer scalewise lines of this type are not idiomatic.

Where the time permits, the suspensions can utilize the ornamental resolution forms of the vocal polyphony.

Ex. 68

The suspension can be combined with a passing-note in another voice, as in the following much used form.

Ex. 69

CHAPTER IV

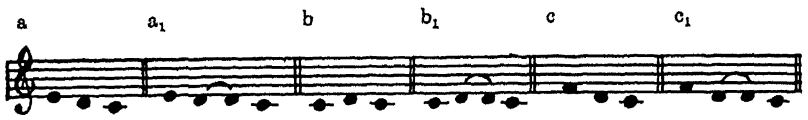
CADENCES

1. The Authentic Cadence

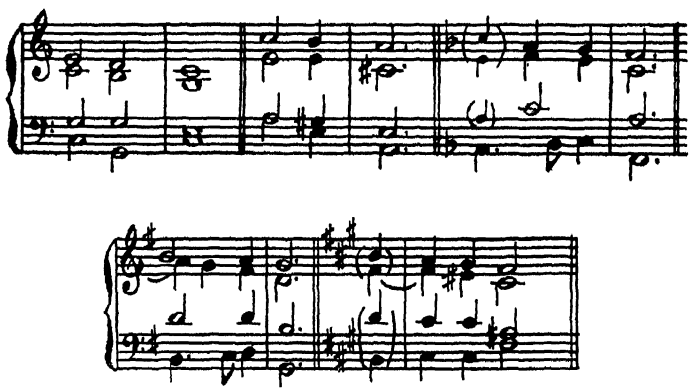
The authentic cadence, V—I (the V at times being replaced by VII_6) occurs both in "closed" (the melody descending stepwise) as well as in "open" (ascending stepwise) form. The illustrations that follow show both forms in the most commonly used harmonic treatments of the last three melody notes.

The typical "closed" melody forms are as follows.

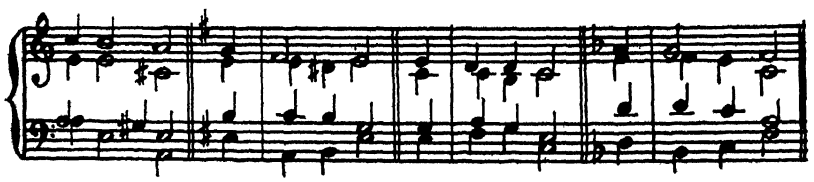
Ex. 70



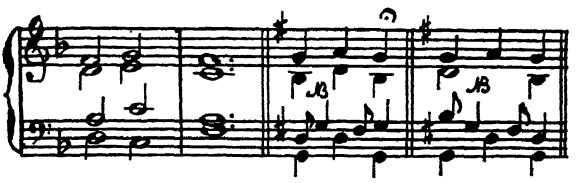
a-formulas: I—V—I; I_6—V—I; I_4^6—V—I.

Ex. 71

From I_6 usually with a bass passing-note from a dotted note. From I_4^6 with the 4th always prepared and resolved as a suspension.

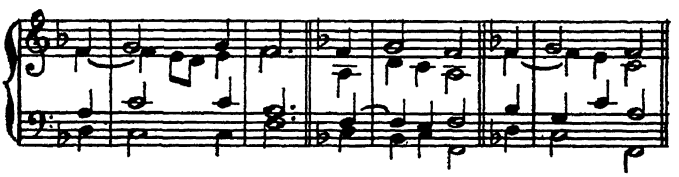
a_1-formulas: I—V—V—I; I—II_5^6—V—I; VI—II_5^6—V—I.

Ex. 72

When the II^6_5 is inserted, the cadential formula can begin with VI instead of I.

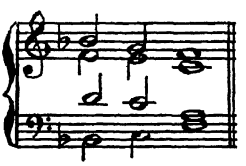
b-formulas: VI—V—I; I—V—I.

Ex. 73

Generally from VI; but if from I the fifth or the third of the first chord may be omitted or left prematurely so that the leading-tone can be introduced correctly.

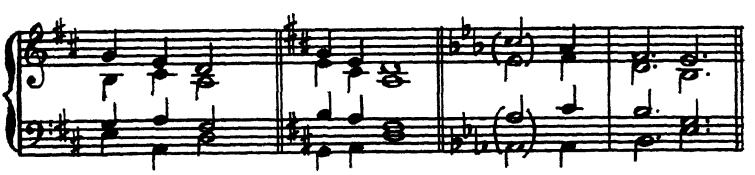
b_1-formulas: VI—V—V—I; VI—II^6_5—V—I; IV_6—V—V—I.

Ex. 74

If the first chord of the cadential formula is IV_6, the fifth of the succeeding V is generally doubled.

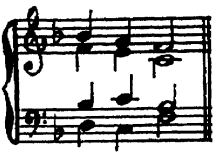
c-formula: IV—V—I.

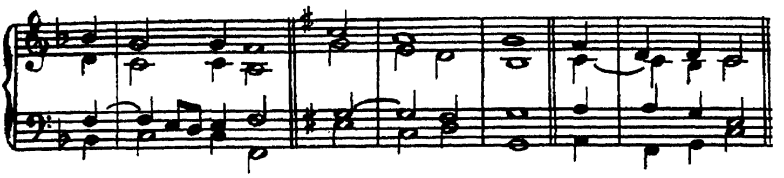
Ex. 75

The above may be considered as being the only fully legitimate c-formula harmonization in the best tradition of this style. Cadences such as II—V—I and II_6—V—I tend to suggest the newer harmonic Chorale treatment and therefore are better avoided.

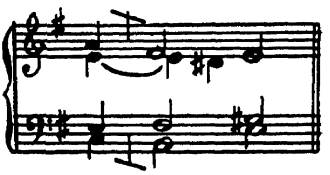
Ex. 76

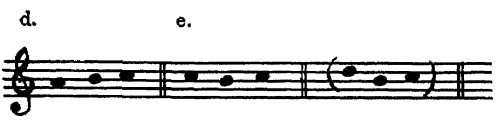


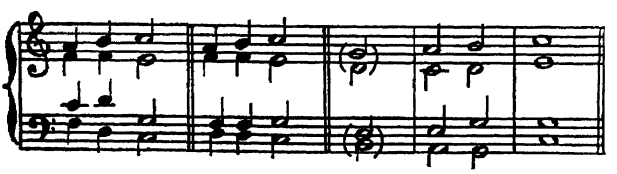
Also out of keeping with this style (and hardly more acceptable in the newer style) is the progression IV_6—V with the "hidden 5ths" in the outside voices.

Ex. 77

c_1-formulas: IV—V—V—I; IV_6—II^6_5—V—I.

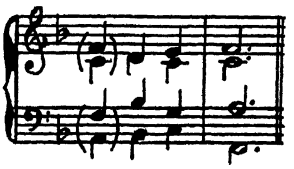
Ex. 78

In *DK* No. 13, line 1 is found the only instance in the entire collection of the formula IV_6—V—V—I.

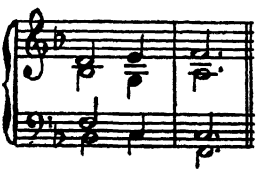
Ex. 79

The typical "open" melody forms are as follows.

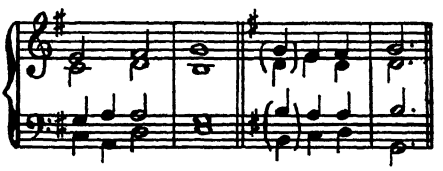
Ex. 80

d-formulas: IV—VII_6—I; II—VII_6—I; VI—V—I; (IV—V—I).

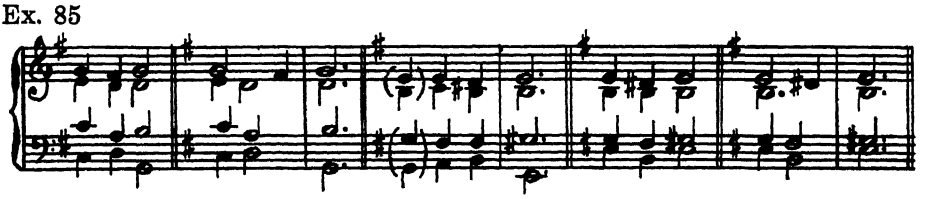
Ex. 81

Generally through VII_6; somewhat less often VI—V (cf. *DK* Nos. 44, 157, and 186a); least common is the progression IV—V because it gives rise to

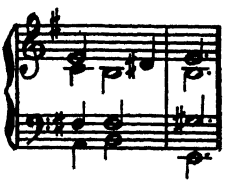
difficult voice-leading problems, which in any case require the omission of the fifth in the IV.

Ex. 82

The following cadence form which occurs quite frequently in Praetorius is clumsy at best, and might be better avoided.

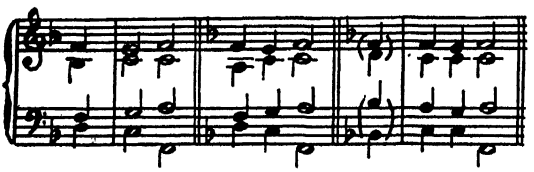
Ex. 83

Even less good and somewhat crude is II—V (occurring only once in *DK*, No. 60, line 3, with a deceptive cadence); with II_6 (which requires the doubled fifth) it is somewhat better.

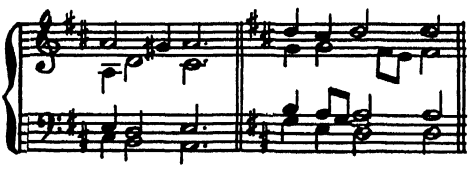
Ex. 84

e-formulas: IV—V—I; II^6_5—V—I; I—V—I; (IV_6—V—I; VI—V—I; I^6_4—V—I).

Ex. 85

One should guard against the use of the $II\,{}^6_5$ in a three-beat measure in a stylistically faulty cadence such as the following.

Ex. 86

The fault here lies in the fact that the suspension is prepared by a dissonant chord tone.

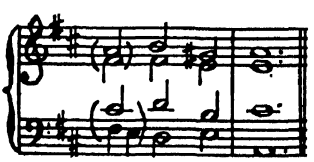
Less common, although fully acceptable, are the following.

Ex. 87

Seldom encountered but nonetheless useful in an intermediate cadence is the VII_6 as a substitute for the V.

Ex. 88

As a variant of the e-formula, but only infrequently found in the modal melodies, is the following.

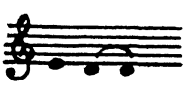
Ex. 89

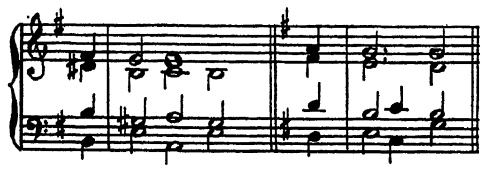
The harmonization is invariably II_6—V—I.

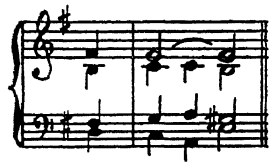
Ex. 90

2. The Plagal Cadence

The plagal cadence, IV—I, appears in two basic capacities: (1) as an extension of the authentic cadence, and (2) as a full cadence in its own right.

(1) As an extension of the authentic cadence its use lies chiefly in harmonizing the following melodic formula.

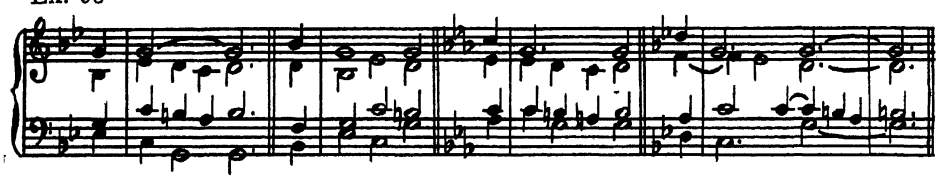
Ex. 91

The harmonies will be either V—I—IV—I or V—VI—IV—I, the latter being a deceptive cadence before the plagal cadence.

Ex. 92

This melody formula is also encountered in the following more subtle form of the preceding authentic cadence, with the third either major or minor.

Ex. 93

(2) The genuine plagal cadence in its own right (i.e., without a preceding authentic cadence) can utilize the following melodic possibilities.

Ex. 94

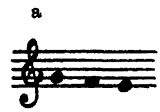
The cadence is generally preceded by VI.

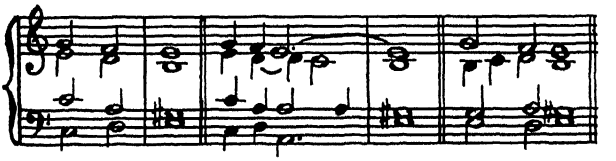
Ex. 95

3. The Phrygian Cadence

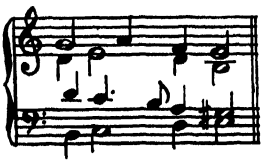
The Phrygian cadence, normally VII—I (i.e., identical with the half cadence IV—V in minor) is used to harmonize both the "closed" and "open" melody forms.

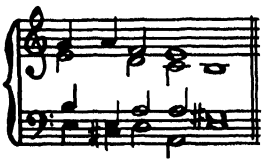
The typical "closed" form is

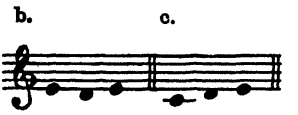
Ex. 96

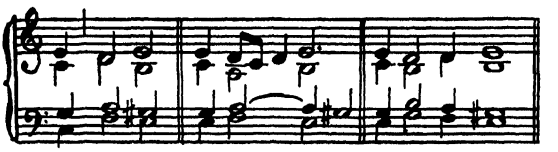
a

a-formulas: VI—VII—I, I—VII—I; also combined with a plagal broadening, VII—IV—I.

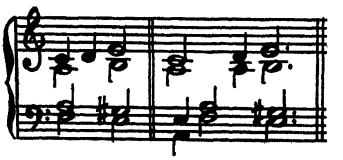
Ex. 97

As a more extended *a-formula:*

Ex. 98

Also with a new chord, here a sort of "intermediate dominant" to the VII.

Ex. 99

The typical "open" melody forms are

Ex. 100

b-formulas: $VI_{(6)}$—VII_6—I; $VI_{(6)}$—III—VII_6—I.

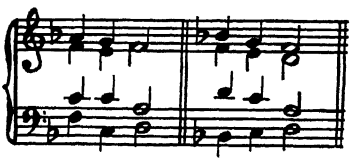
Ex. 101

c-formula: II—VII_6—I.

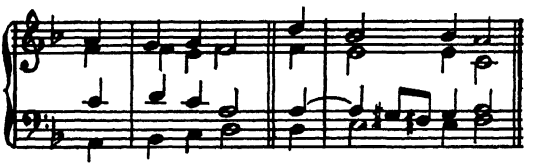
Ex. 102

In the following melody forms, it becomes identical with the plagal cadence (cf. Ex. 94).

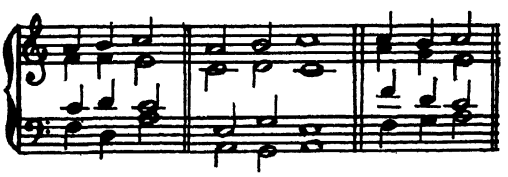
Ex. 103

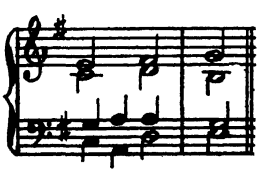
4. The Deceptive Cadence

The deceptive cadence (V—VI) as substitute for the authentic cadence when the third of the chord is in the soprano can be used in the previously shown "closed" melody forms for the authentic cadence, generally as follows:

Ex. 104

Considerably less frequent, although quite acceptable, this cadence can likewise be used in the broader forms brought about by the lengthening of the penultimate note.

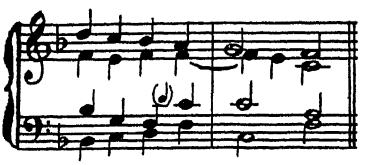
Ex. 105

In the "open" melodic forms the deceptive cadence is as good as impossible.

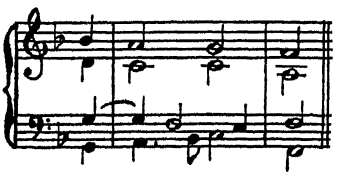
Ex. 106

The above and similar deceptive cadence forms that are quite acceptable in the major–minor Chorale style obviously do not belong to the modal church style. Only two such exceptional cases occur in *DK*, No. 37, line 3 and No. 60, line 3, the latter being shown below.

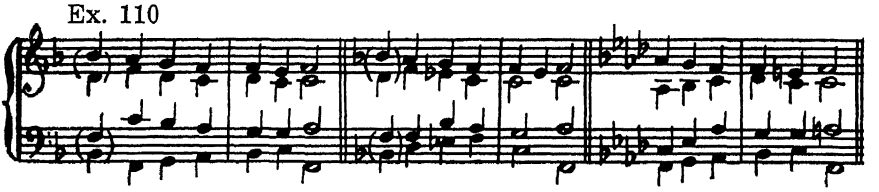
Ex. 107

The explanation for this difference in the treatment of "closed" and "open" cadences is to be found in the relatively stronger melodic energy. Since the latter embodies more tension and striving, the deceptive cadence is too weak to support the melody. The same psychological reason underlies the relatively sparing use of the deceptive cadence at the broader and more pronounced "closed" formulas in connection with the penultimate note.

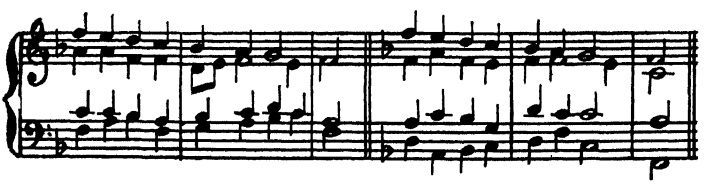
5. Typical Scalewise Cadence Forms

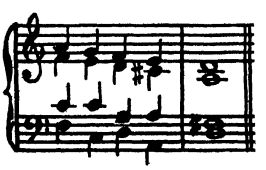
(1) From the sixth degree to the tonic (hexachord):

Ex. 108

(2) From the fourth degree to the tonic:

Ex. 109

(3) From the third or fourth degree with "open" cadence:

Ex. 110

(4) From octave to tonic, the descending major scale (Ionian mode):

Ex. 111

(5) In the minor modes (Dorian and Aeolian) the following cadential form from the fifth degree to the tonic appears often, and is usually harmonized as follows.

Ex. 112

Cf. Ex. 26.

CHAPTER V

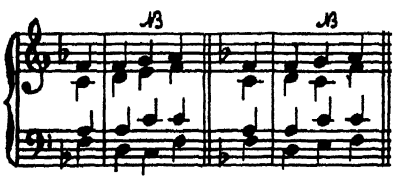
TYPICAL OPENING MOTIVES

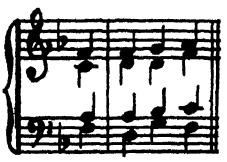
1. Major

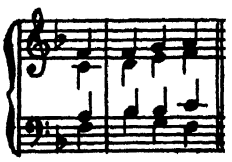
(1) From the tonic ascending stepwise to the third degree:

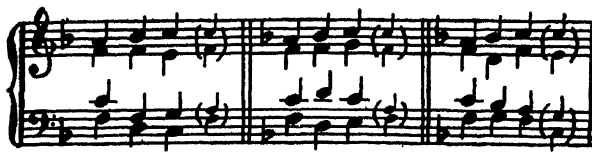
Ex. 113

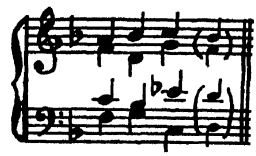
A VI after the anacrusis is most frequently followed by V, less often by V_6.

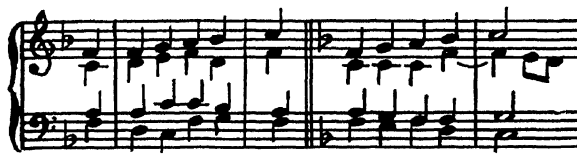
Ex. 114

A VI can be followed, although only relatively few instances of it exist, by II.

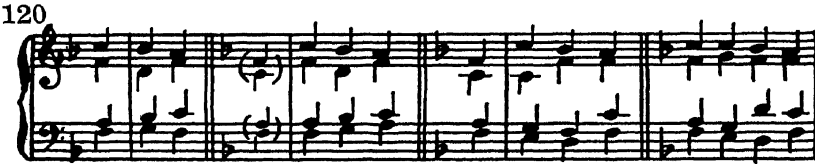
Ex. 115

When IV follows the anacrusis, it in turn is followed most naturally by VII_6.

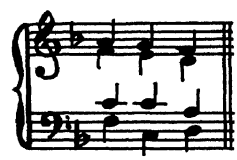
Ex. 116

(2) Ascending stepwise from the third degree to the fifth:

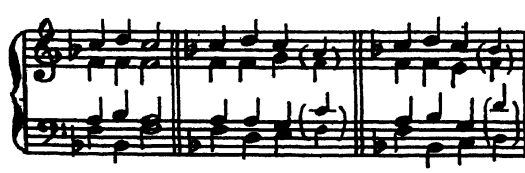
Ex. 117

More rarely:

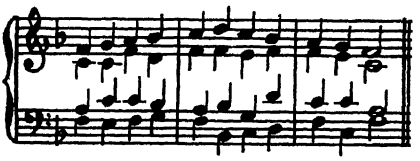
Ex. 118

In combination, (1) and (2) produce the following.

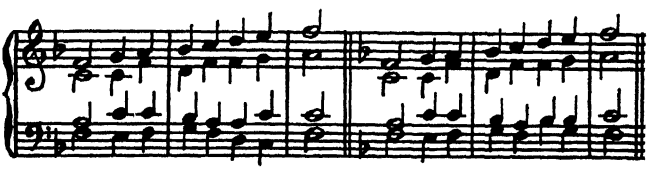
Ex. 119

(3) From the fifth degree, descending stepwise to the third:

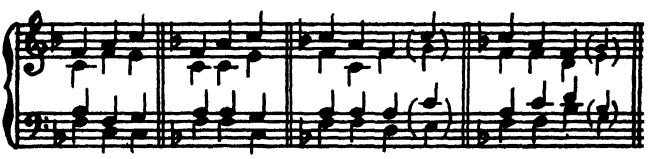
Ex. 120

(4) From the third degree, descending stepwise to the tonic:

Ex. 121

(5) From the fifth degree to the sixth and returning:

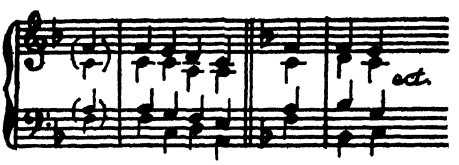
Ex. 122

In combination (1), (2), (5), (3) + cadence produce the following harmonization of the major hexachord, ascending and descending.

Ex. 123

In combination (1) and (2) + the "open" cadence (VI—V—I or IV—VII_6—I) produce the following harmonization of the ascending major scale.

Ex. 124

(6) From the tonic to the fifth degree by 3rds, and vice versa:

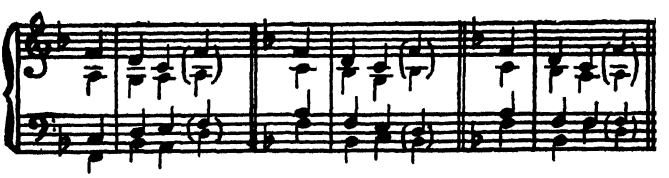
Ex. 125

(7) From the tonic, descending to the fifth degree:

Ex. 126



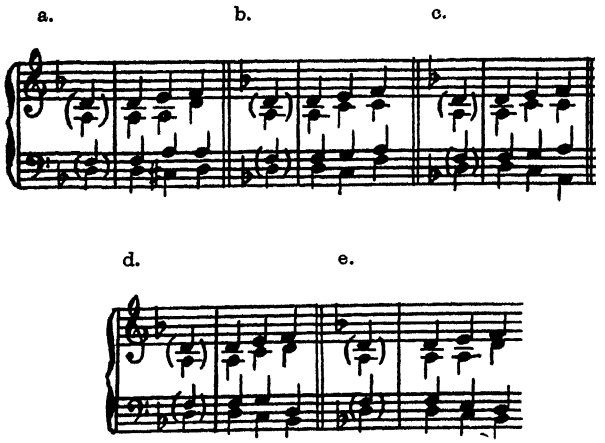
(8) From the tonic, descending pentatonically to the fifth degree:

Ex. 127

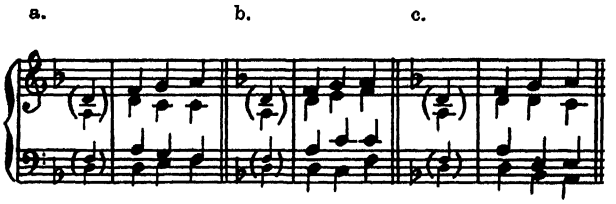


2. Minor (Dorian, Aeolian)

(1) From the tonic, ascending scalewise to the third degree:

Ex. 128

The most common beginning of a stanza is that at a.; the remaining ones with the characteristic bypassing of the leading-tone are, however, not unusual; notably e., which frequently follows an intermediate cadence.

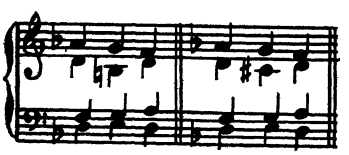
(2) From the third degree, ascending scalewise to the dominant:

Ex. 129

Most commonly used are a. and b.; more seldom c. However, at the close or half-close with the major third, the contrary is generally true.

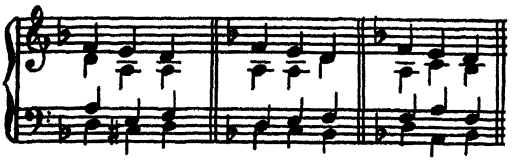
(3) From the dominant, descending stepwise to the third degree:

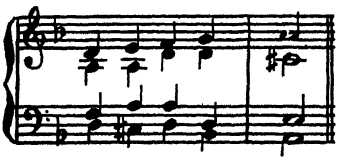
Ex. 130

At the beginning of a line, a. (identical with a scalewise descent from the third degree in major) is preferred over b. (cf. *DK* Nos. 88 and 57.) Completely alien to this style are beginnings such as the following.

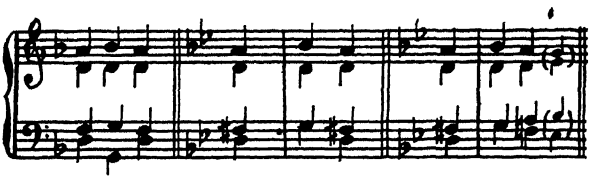
Ex. 131

(4) From the third degree, descending scalewise to the tonic:

a. b. c.

Ex. 132

At the beginning of a stanza, a. or b. would be preferred.
In combination, (1) and (2) produce the following.

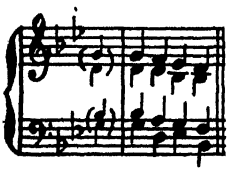
Ex. 133

(5) From the dominant to the sixth degree and return:

a. b. c.

Ex. 134

Illustrations b. and c. are in the Phrygian mode.

(6) From the tonic to the dominant by 3rds, and vice versa, is not typical.

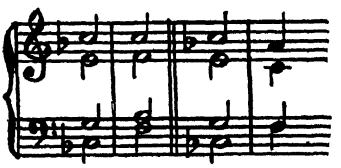
(7) From the tonic, descending stepwise to the dominant.

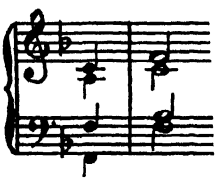
Ex. 135

CHAPTER VI

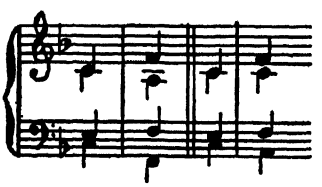
THE IONIAN MODE (C-C)

The First Chord

For the beginning of the first full measure, the chord is always I with either the root, third or fifth in the melody. As anacrusis with the root or third in the melody, always I; with the fifth in the melody usually I, although sometimes V, after which will come (as a repeated note) the fifth of the I triad, or a leap to the third.

Ex. 136

When the melody leaps from a dominant anacrusis to the tonic, always I—I,

Ex. 137

never the "newer" forms such as the following.

Ex. 138

When the root of the tonic appears both at the anacrusis and on the succeeding note, the following harmonizations are acceptable.

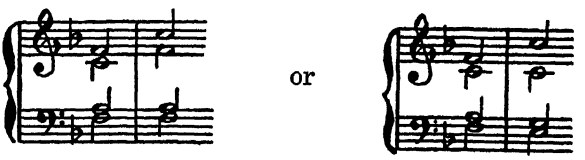
Ex. 139

In an ascending leap to the third degree, only

Ex. 140

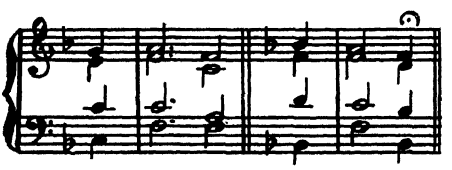
In an ascending leap to the dominant, either

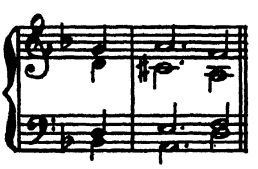
Ex. 141

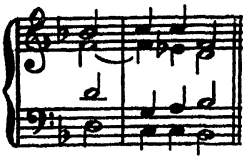


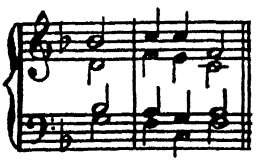
Intermediate Cadence Forms

The intermediate cadences (that is, at all lines in a Chorale except the last) in this mode can occur on any note of the scale. The harmonic treatment of such cadences to the tonic, whether "closed" and "open", will in general conform to what is explained before under Cadences — authentic as well as deceptive. Also, such cadential tonics can be approached by descending leaps of a 3rd or 5th. In the first of the following cadential situations both chords are generally I, but I—IV is also available.

Ex. 142

Less commonly such a cadence may be harmonized by a modulation to the relative minor mode (Aeolian).

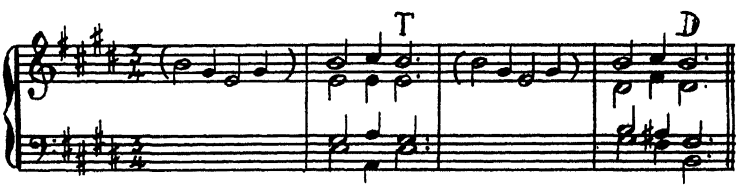
Ex. 143

When the tonic is approached by a descending leap of a 5th the following form is ordinarily used, implying a modulation to the subdominant mode (Lydian).

Ex. 144

Also usable, but hardly as good, is the following.

Ex. 145

The cadence to the fifth degree can in most of the "closed" melody forms be done either by a modulation to the dominant mode (Mixolydian) or by remaining in the original mode. In the latter case there will usually be a somewhat indecisive plagal cadence or, less frequently, a half cadence (IV—V).

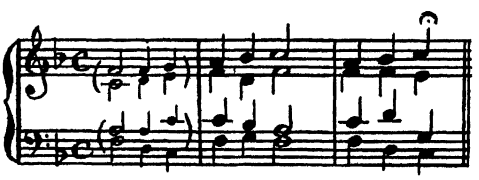
Firmer cadential effects, even when one of the above seems unsatisfactory, do not exist. Even at the literal repeat of the same melodic figure no definite principle can be laid down except that at the repeat the cadence is usually in the dominant mode. In other words, Tonic-Dominant or Dominant-Dominant, but not Tonic-Tonic or (least of all) Dominant-Tonic.

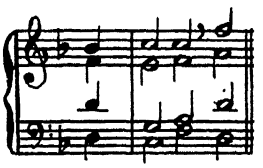
Ex. 146

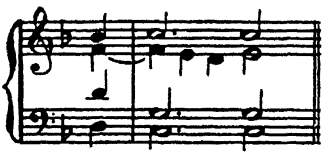


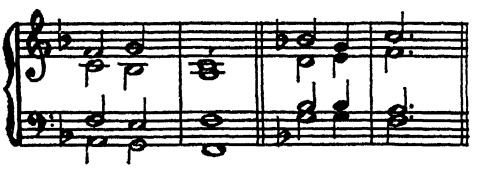
An instance of Dominant-Dominant is to be found in *DK*, No. 96, lines 3 and 4.

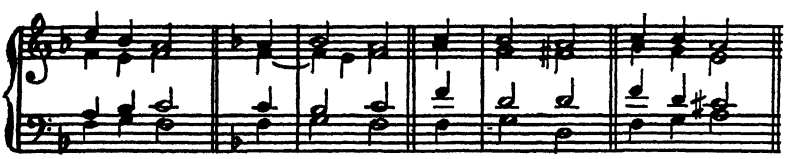
The "open" cadence with a new leading-tone requires an obvious modulation to the dominant mode. The original mode, without the leading-tone, generally is harmonized by II—I or IV_6—I.

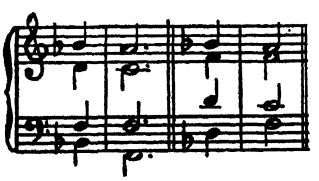
Ex. 147

When the dominant note is repeated or prolonged through an additional beat the harmonization may be IV_6—V—I, although this is best at a short pause.

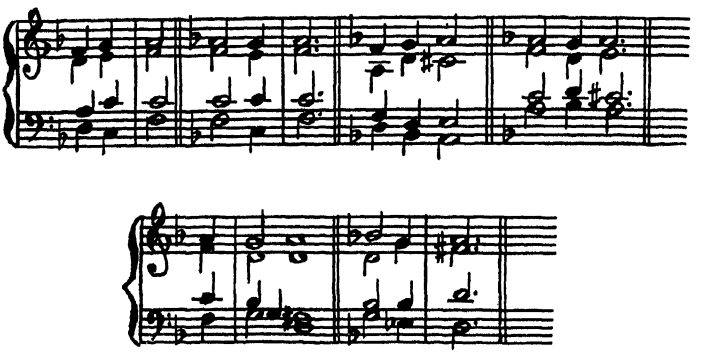
Ex. 148

At a longer pause V harmony is preferable, which can be treated ornamentally in an inner voice.

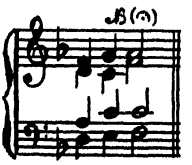
Ex. 149

When the dominant is approached by a descending leap of a 5th (cf. Ex. 145) or an ascending leap of a 4th, the harmony is generally VII_6—I.

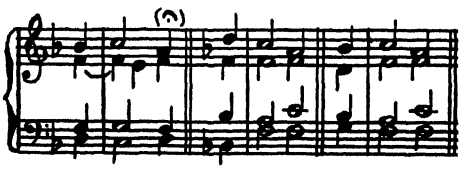
Ex. 150

The "closed" cadence to the third can be harmonized by VII_6—I or by a half cadence in the Dorian; and more seldom with a full Phrygian cadence.

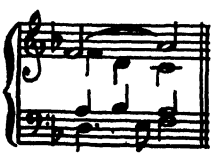
Ex. 151

When the penultimate chord has only one beat, the plagal cadence (IV—I) is usable.

Ex. 152

When the cadence is "open", either V—I or the Phrygian full cadence is used; more rarely the Dorian half cadence.

Ex. 153

A cadence consisting of (VI)—V_6—I is hardly stylistically valid.

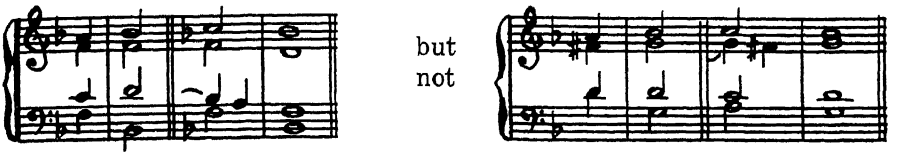
Ex. 154

When the third degree is approached by a descending leap of a 3rd from the dominant, the deceptive cadence (V—VI) is best, although I—I is quite acceptable.

Ex. 155

When the third is approached by an ascending leap from the tonic, the progression VI—I is good. An isolated instance appears in *DK*, No. 99, penultimate line.

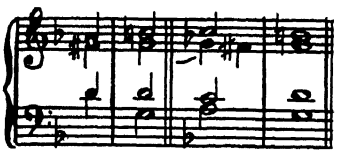
Ex. 156

Cadences to the fourth degree, rare in this mode, assume the form of an authentic cadence in the subdominant mode (Lydian). The imperfect cadence to the parallel mode of the subdominant (Dorian), which in certain cases may seem closely related, should be categorically avoided as alien to the style.

Therefore

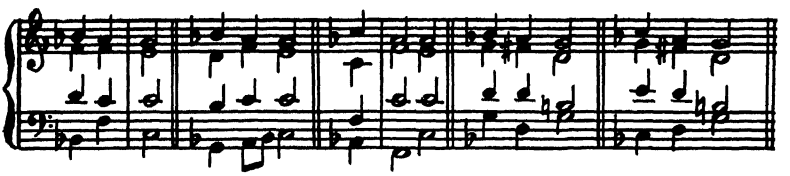
Ex. 157

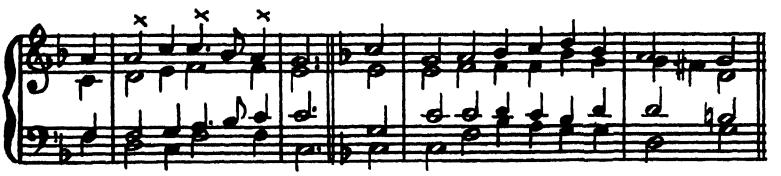


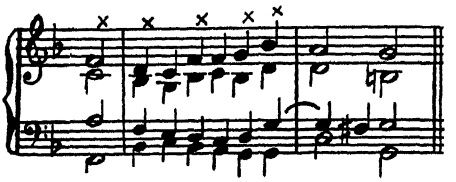
The explanation for this restriction will doubtless be found in the stylistic modal practice of using the major third in the cadential tonic triad in the minor modes — Dorian, Phrygian and Aeolian. The cadence to the Dorian above all requires the major tonic triad,

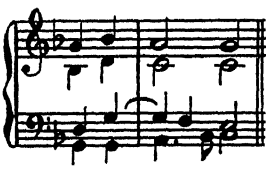
Ex. 158

which may well become an impossible encroachment upon a given Chorale melody. Characteristically enough, this particular cadence in the Dorian appears only twice in *DK* in newer melodies by Laub himself — No. 164, penultimate line, and No. 178, line 4.

The cadence to the second degree becomes "closed" even as a tonal half cadence, I—V, or as a full cadence in the Dorian.

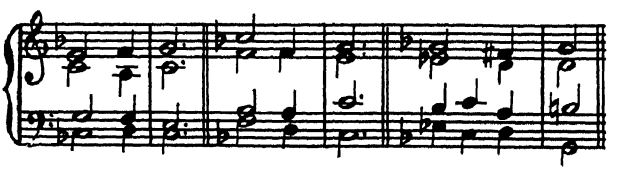
Ex. 159

These two cadence forms, the tonal half cadence and the Dorian full cadence, can under certain conditions be used *ad libitum* (cf. *DK*, No. 93 a and b, the third from the last line). The Dorian cadence may well be reserved for such situations, where the special character (i.e., its principal notes) of a particular melody invites its usage. While the first of the following two melodies is in essence tonal, the second by the same token suggests a Dorian cadence.

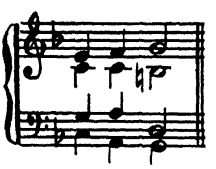
Ex. 160

Even the initial line can require the Dorian cadence,

Ex. 161

which in this case is due entirely to the pentatonic upswing in the melody. The tonal beginning in this instance is so ambiguous in effect that a cadence such as the following is for all practical purposes out of the question.

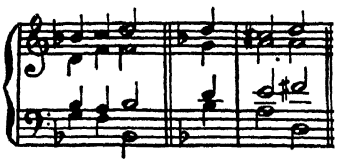
Ex. 162

Cf. *DK*, No. 127a and b, line 1, where the Dorian cadence in B-flat comes about quite naturally.

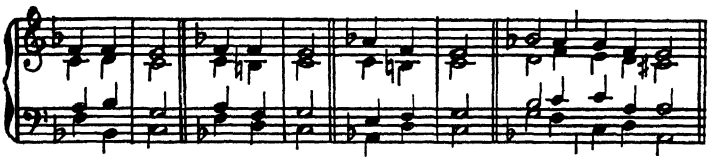
At an "open" cadence to the second degree the half cadence, VI—V, can be used. However, the Dorian cadence is natural when the melody contains the leading-tone.

Ex. 163

In the first form shown above, the half cadence, IV_6—V, in the dominant mode can be substituted.

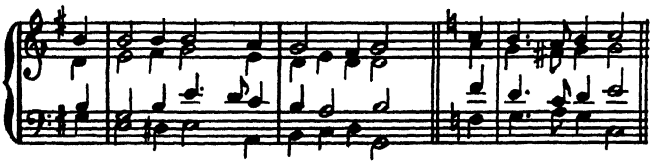
Ex. 164

The cadence to the sixth degree (submediant) functions in "closed" form as an authentic cadence in the parallel mode (Aeolian). Sometimes, also, the deceptive cadence is used and in such cases where no leading-tone occurs. (Cf. *DK*, No. 33, the penultimate line, and No. 164, line 1.)

In the "open" form the imperfect authentic cadence (third in soprano) on the subdominant (Lydian) can be used. The Aeolian cadence is naturally employed in instances where the melody contains the leading-tone.

Ex. 165

The cadence to the seventh degree (subtonic) nearly always takes the half cadence (V) in both "closed" and "open" forms; although also with a modulation to the Mixolydian. In exceptional cases, as in a descending scalewise passage of several notes through an Aeolian half cadence, the last of the following illustrations is possible.

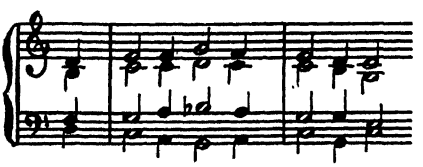
Ex. 166

Accidentals

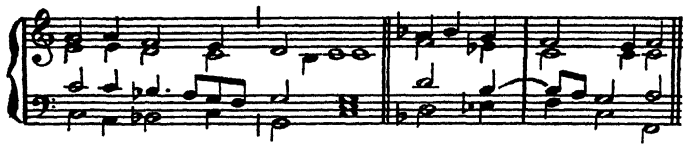
Besides the accidentals necessary to provide new leading-tones for modulations to other modes, one can also encounter — although rarely — such as in major–minor music produce what are sometimes called "borrowed" or "secondary" dominants, or their substitutes. In addition to the examples already given, the following can be considered as supplementary.

Ex. 167

(V) VI (VII) V

A fairly important part is played by 'B-flat' when it serves as substitute for 'B-natural', that is in place of the leading-tone, whereby the chord at that point can be made into a V with the minor third and the VII into a pure major triad in root position. It is by this means that the Ionian mode, from the harmonic point of view, is most strikingly distinguished from the modern major key.

What concerns the V triad with the minor third is a phenomenon already discussed in the Introduction (cf. Ex. 24a.) and the reasons for its existence are amply explained. As still another example, the following is given.

Ex. 168

And, finally, examples of the VII in the form of a pure major triad:

Ex. 169

Examine also the following harmonizations of Ionian melodies in *DK* (the numbers are given in the order of harmonic interest): Nos. 116, 119, 104, 44, 93a and b, 72, 32, 5, 69, 28, 159, 2.

CHAPTER VII

THE AEOLIAN MODE (A-A)

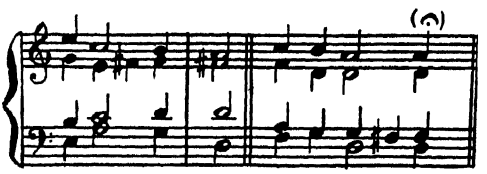
The First Chord

In all three positions — that is with the root, third, or fifth in the melody — and whether accented or upon the anacrusis, the first chord in this mode is always tonic.

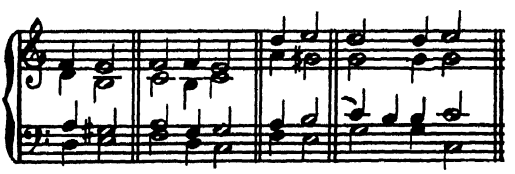
Intermediate Cadences

The intermediate cadences, that is the close of each line except the last, can occur on any degree of the mode except the sixth. The harmonic treatment of the cadence to the tonic in both "closed" and "open" forms will nearly always conform to what is said about authentic and deceptive cadences in Chapter IV. More exceptional is the use of the Mixolydian half cadence:

Ex. 170

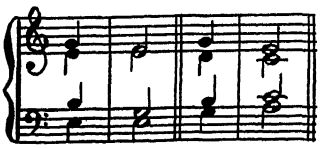


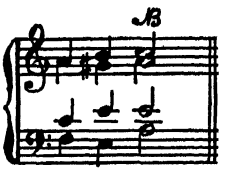
The cadence to the dominant takes place in both "closed" and "open" forms generally as a Phrygian full close (corresponding to the tonal half cadence) or as the authentic cadence to the third in the Ionian,

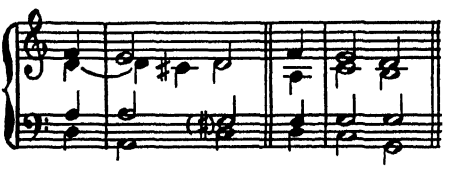
Ex. 171

or as a Dorian half cadence in "closed" form.

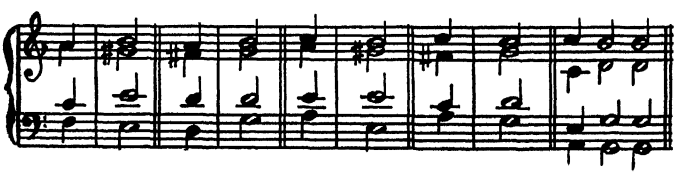
Ex. 172

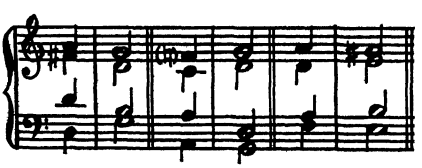
When the dominant is approached by the leap of a descending minor third, it can be treated either as a tonal V—V or as a deceptive cadence in the Ionian.

Ex. 173

The cadence to the third degree, "closed" as well as "open", is treated as an Ionian authentic cadence (cf. Chapter VI, Ex. 143).

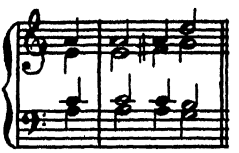
Ex. 174

The cadence to the fourth degree, generally "closed", will occur either as a Dorian authentic cadence or as an Ionian half cadence.

Ex. 175

The cadence to the second degree, "closed" or "open", is treated either as a tonal half cadence (V) or as a Mixolydian cadence to the third, and only in exceptional cases as an Ionian half cadence.

Ex. 176

The cadence to the seventh degree in "closed" form is treated as a Mixolydian authentic cadence; and in "open" form as an Ionian half cadence, and with a pause on the seventh degree naturally as a tonal half cadence.

Ex. 177

Accidentals

In this mode accidentals give rise to no great problems. While 'B-flat' as a substitute for 'B-natural' is virtually excluded, accidentals appear solely as necessary leading-tones, as the raised third in the final chord, or as incidentally used "borrowed" dominants. The last possibility is illustrated herewith.

Ex. 178

The following harmonizations of Aeolian melodies in *DK* merit examination: Nos. 188, 134, 76, 169, 118, 128, 47.

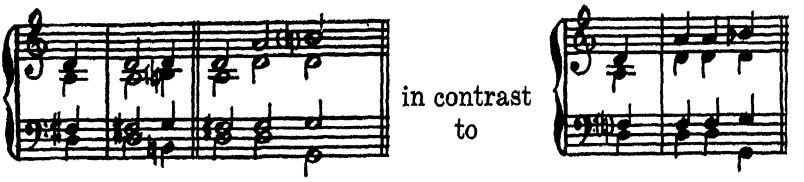
CHAPTER VIII

THE DORIAN MODE (D-D)

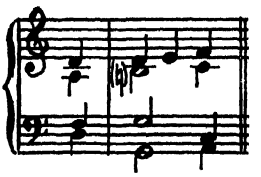
The First Chord

With the tonic or third as the initial note, the first chord is generally tonic. When the second chord is the IV with the major third, the first chord (when the root is in the melody) can also be major.

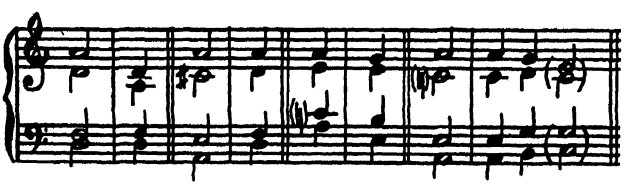
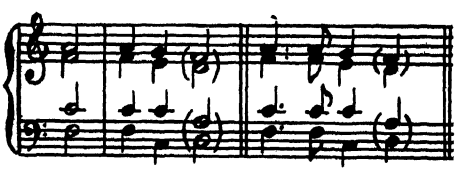
Ex. 179



The IV with the major third can follow the minor I.

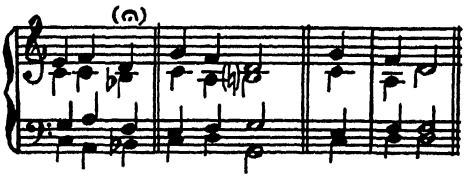
Ex. 180

With the fifth in the melody the first chord can be either I, V, or III. When V progresses to I use the major third in V, but in all other cases the minor third.

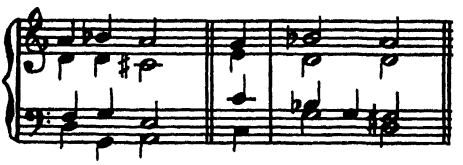
Ex. 181

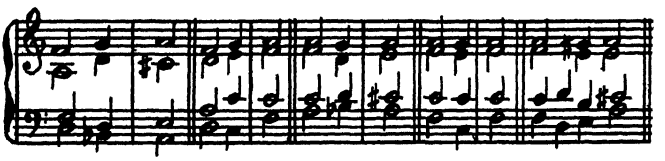


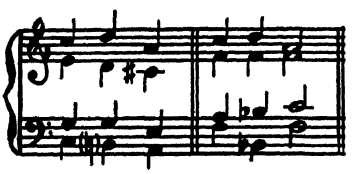
Intermediate Cadences

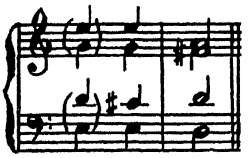
Intermediate cadences in this mode can occur on every degree except the sixth, whether it be 'B-natural' or 'B-flat'. The cadence to the tonic can be either "closed" or "open" and is usually authentic. The deceptive cadence is rare and appears in *DK* only once, in No. 166. When the tonic is approached by a descending 3rd in the melody, the cadence can be either III—VI or I—IV, and occasionally I—I with the minor third also in the final chord.

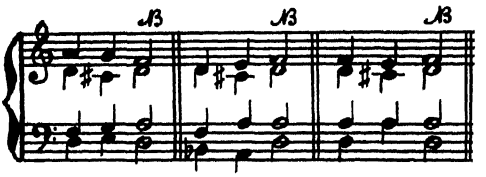
Ex. 182

The cadence to the dominant can be "closed" with the major sixth ('B-natural'), generally with a modulation to the Aeolian, either authentic or deceptive. With the minor sixth ('B-flat'), scalewise downward with a half cadence (IV—V), or more seldom with an imperfect plagal cadence (IV—I).

Ex. 183

"Open" by whole step requires either a tonal half cadence (IV_6—V) or the imperfect authentic cadence to the Lydian; with the raised leading-tone quite naturally an Aeolian authentic cadence.

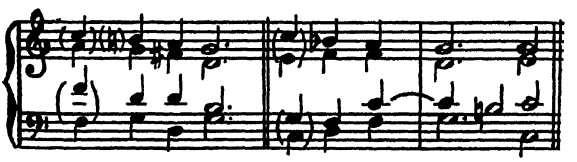
Ex. 184

When approached by a descending leap of a 4th, the cadence can be either IV_6—V or the imperfect Lydian plagal cadence.

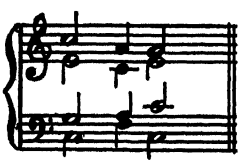
Ex. 185

With a descending leap of a 5th, the cadence will be VII_6—I.

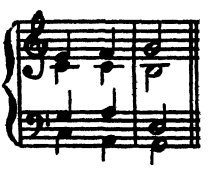
Ex. 186

A cadence to the third degree, whether "closed" or "open", will be the authentic or deceptive Lydian; never a tonal cadence to the third.

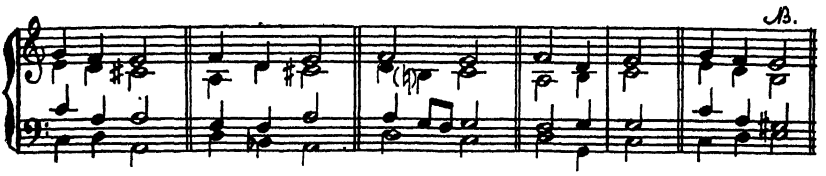
Ex. 187

Cf. Chapter VI, The Ionian Mode.

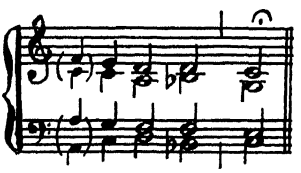
The cadence to the fourth degree is "closed" when it descends from the major 6th ('B-natural') in the melody and requires an authentic Mixolydian cadence. From the minor 6th ('B-flat') either the imperfect authentic or the plagal cadence in the Ionian can be used.

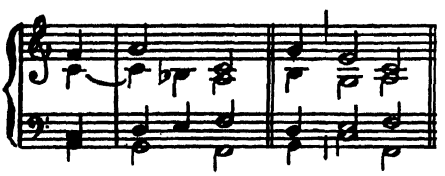
Ex. 188

The following cadence is admissible when the melody leaps in such a way that the sixth degree is omitted.

Ex. 189

In "open" form, ascending by whole step to the last note, the Ionian half cadence is customary.

Ex. 190

The cadence to the second degree, whether "closed" or "open", will be either the tonal half cadence (V) or as the cadence to the third (from VII_6 or V in the Ionian), but never the Phrygian.

Ex. 191

The cadence to the seventh degree (subtonic), whether "closed" or "open", will be the Ionian authentic. The following (tonal VI—VII) can be used, but it is archaically indecisive in effect.

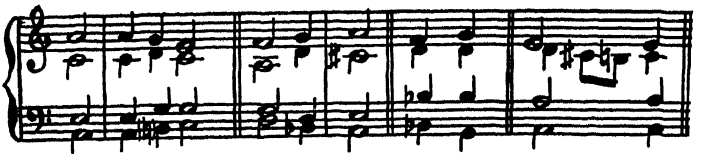
Ex. 192

The rarely occurring descending leaps of a 3rd or 5th to the final tonic invariably take the imperfect Lydian cadence.

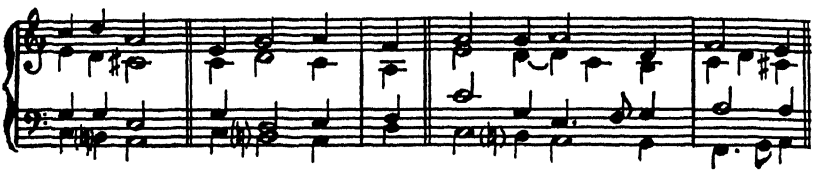
Ex. 193

Only very rarely does a pause occur on the leading-tone. In such cases the tonal half cadence (V) is used.

Accidentals

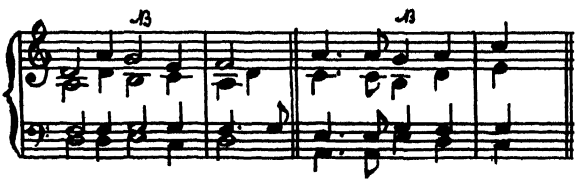
When accidentals occur — except those used to bring about a cadence (modal or modulatory) by raising the leading-tone or to raise the third in the final triad — in much the same way that the 'B-flat' is used instead of the 'B-natural' in the Ionian, they have in this mode a still wider usage. The VI triad with the 'B-natural' is practically never used except in a modulatory capacity as VII_6 in the Ionian. As the third in the IV, 'B-flat' is used as requirements dictate, that is to say according to the normal rules for ascending, descending, or in a melodic arc (cf. Ex. 16–24).

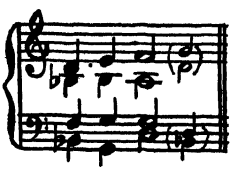
But, exceptions to these general rules do appear more or less freely, especially where harmonic considerations are given preference over the strictly linear. In the meantime, the uses of 'B-flat' and 'B-natural' in the following illustrations in the VI are self-explanatory.

Ex. 194

However, the use of 'B-natural' in the following illustrations is not quite so obvious.

Ex. 195

It can be noted that in all three illustrations the IV_6 follows 'C', whereby 'B-flat' descends more forcefully than 'B-natural'. The contrary is shown in the last example where the 'B-natural' in the alto is used in order to return more effectively to 'C'.

The II in root position because of the harmonic considerations will always require 'B-natural' in order to avoid the diminished 5th. Because of its wide usage it can be said without a doubt that this chord is the one that serves to distinguish the modal character of the Dorian from the modern minor; and where the minor dominant, according to the rules, is most often resolved upward. In general the treatment is as follows.

Ex. 196

The contrary holds true with the II_6 which almost exclusively is used with the 'B-flat', thereby coinciding with the normal scalewise situations that exclude the 'B-natural'.

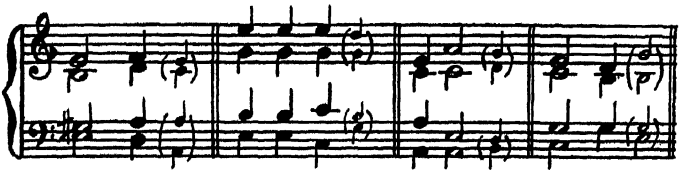
Ex. 197

Examine also the following harmonizations of Dorian melodies in *DK* which, again, are given in the order of harmonic interest: Nos. 12, 98, 49, 17, 15, 87, 83, 166, 200, 103, 196. Nos. 49 and 17 have the Aeolian signature, but are nonetheless pure Dorian, which is shown by the modulation to the dominant as Aeolian, not Phrygian.

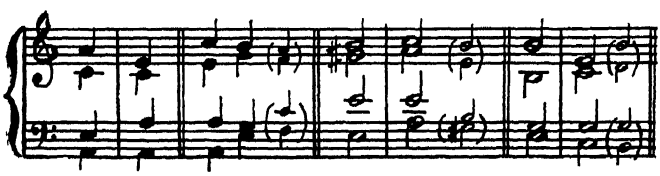
CHAPTER IX

THE PHRYGIAN MODE (E-E)

The First Chord

When the tonic is in the melody the first chord can be I (with either major or minor third as the voice-leading dictates), IV, or VI.

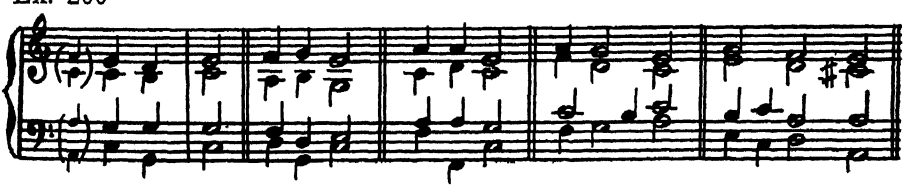
Ex. 198

With the fourth or sixth degrees as the first note in the melody, use IV, and with the dominant as the first note use I (either major or minor as the voice-leading dictates).

Ex. 199

Intermediate Cadences

In this mode intermediate cadences can appear on every degree except the second, a single exception to this rule being found in one of the newer melodies in *DK*, No. 206, line 1. For suitable cadences to the tonic see Ex. 96–103.

A cadence to the third degree can use the Ionian authentic, plagal, or deceptive; or the Dorian half cadence.

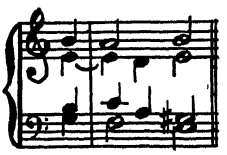
Ex. 200

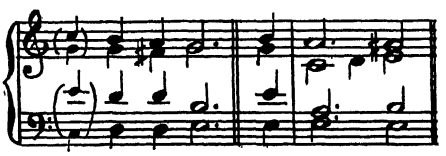
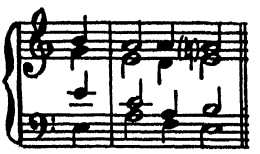


The cadence to the dominant in "closed" form takes IV—I, and in "open" II—I; or as the cadence to the third in the Mixolydian.

Ex. 201

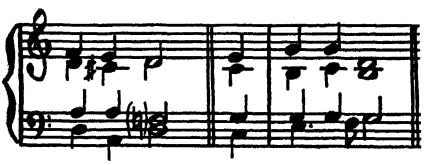
A rare example (*DK*, No. 115b) uses VII_6—I with parallel 5ths in the soprano and alto.

Ex. 202

The cadence to the third degree, which is used in "closed" form only, appears mostly as an authentic or deceptive cadence to the Mixolydian, with the major third.

Ex. 203

but also

The cadence to the fourth degree, scalewise "closed", takes place only as an authentic cadence to the Aeolian.

To the sixth degree, whether "closed" or "open", the cadence is always that of the Ionian authentic.

The cadence to the seventh degree occurs only seldom and then as an authentic Dorian cadence or as a half cadence in the Ionian.

Ex. 204

Accidentals

In this mode accidentals present no great problem. Since 'B-flat' as a substitute for 'B-natural' is virtually excluded, the only necessary chromaticism is to the majored third in the final chord.

Examine also the following harmonizations of Phrygian melodies in *DK:* Nos. 115b, 54, 171.

CHAPTER X

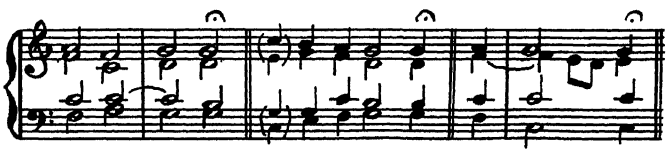
THE MIXOLYDIAN MODE (G-G)

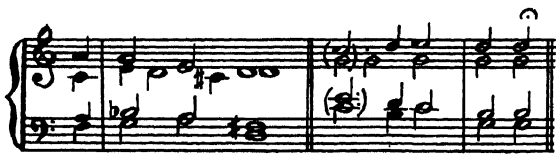
The First Chord

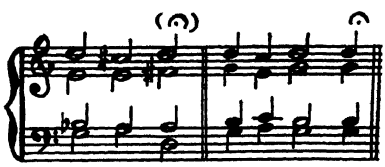
The first chord is generally I, in all three positions, but when the tonic is in the melody IV is also acceptable. When the dominant is used as an anacrusis, the chord can be V with the major third.

Intermediate Cadences

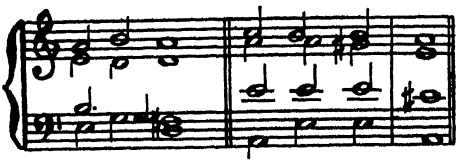
Intermediate cadences in this mode can occur on any degree except the third. However, the cadence on the seventh degree comes about so seldom that it scarcely merits discussion. The cadence to the tonic, whether "closed" or "open", is identical with the Ionian and is treated in the same way harmonically. The "open" cadence can also appear without the leading-tone in the manner of the Ionian half cadence. Correspondingly, in the "closed" form an imperfect plagal cadence in the Ionian is also possible here.

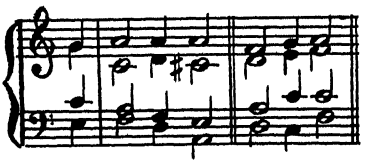
Ex. 205

The cadence to the dominant occurs usually in "closed" form as a Dorian authentic; but also, at less highly stressed cadential points, as the imperfect tonal plagal cadence.

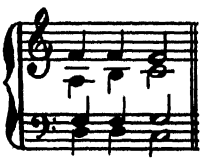
Ex. 206

In "open" form with the leading-tone, exclusively as an authentic cadence in the Dorian; without the leading-tone, tonally in connection with II—I.

Ex. 207

The cadence to the fourth degree, "closed" as well as "open", is treated exclusively as an Ionian authentic cadence.

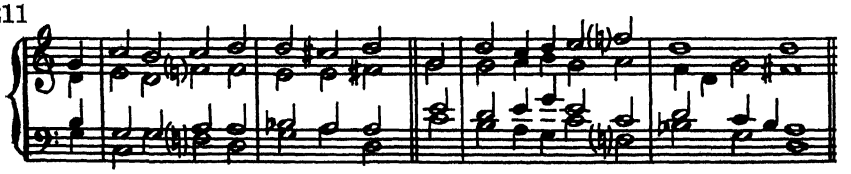
The cadence to the second degree, whether "closed" or "open", takes place as a tonal half cadence, but in the "closed" form it can likewise be treated as an Aeolian authentic cadence.

Ex. 208

In "open" form it can take an Aeolian plagal cadence or a Lydian cadence to the third degree.

Ex. 209

The cadence to the sixth degree, "closed" only, is best treated like a cadence to the third in the Ionian.

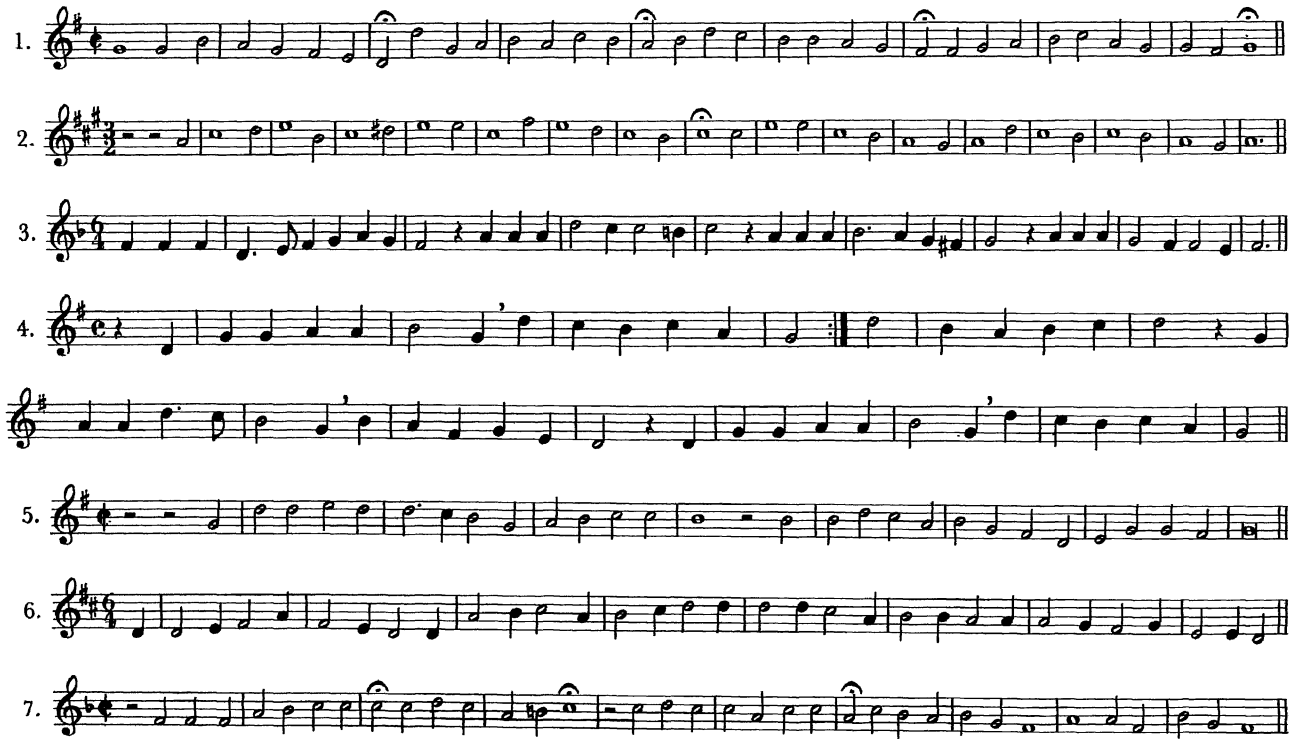
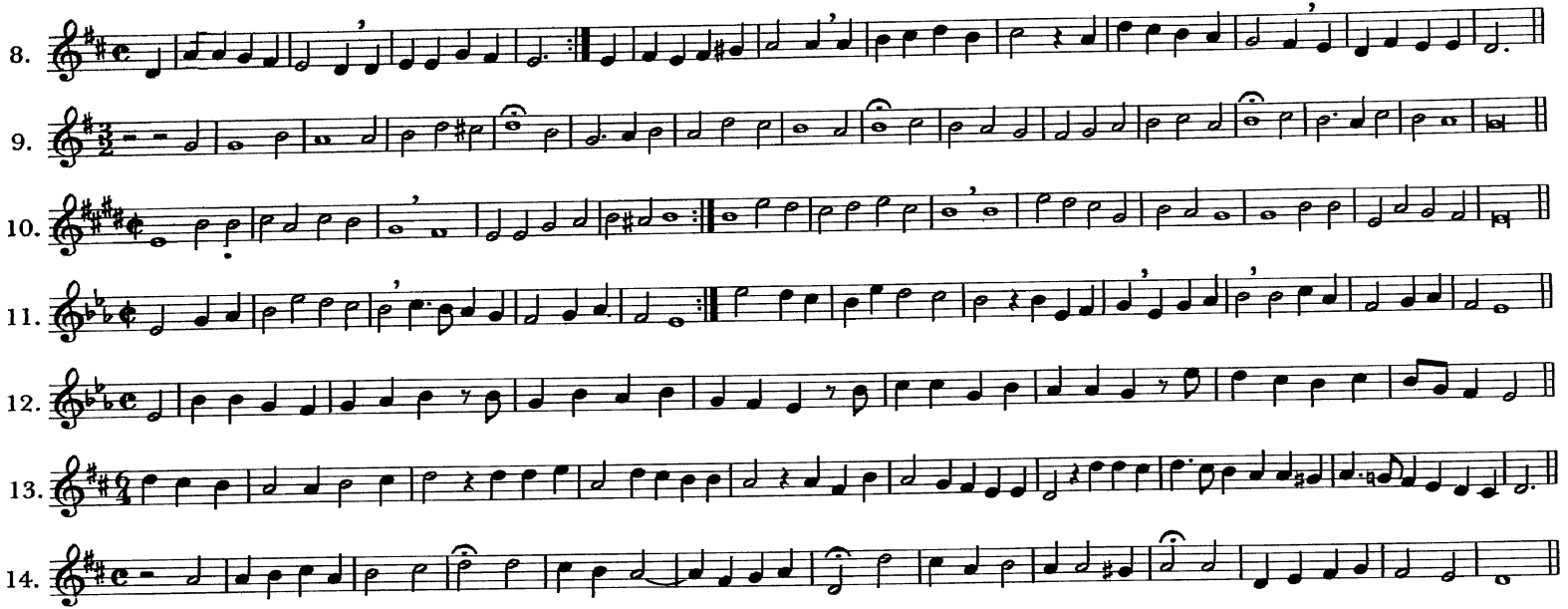
Ex. 210

Accidentals

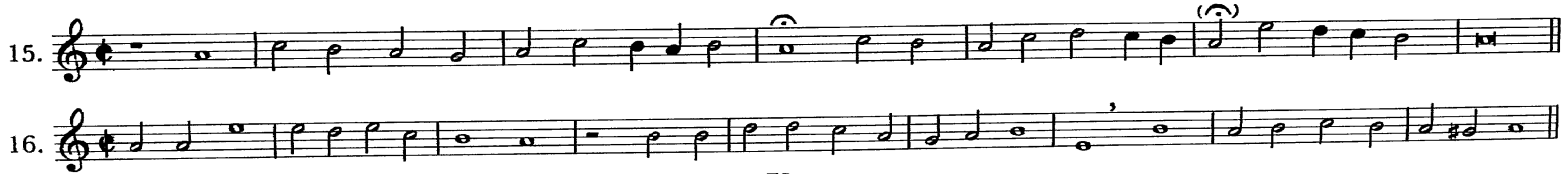
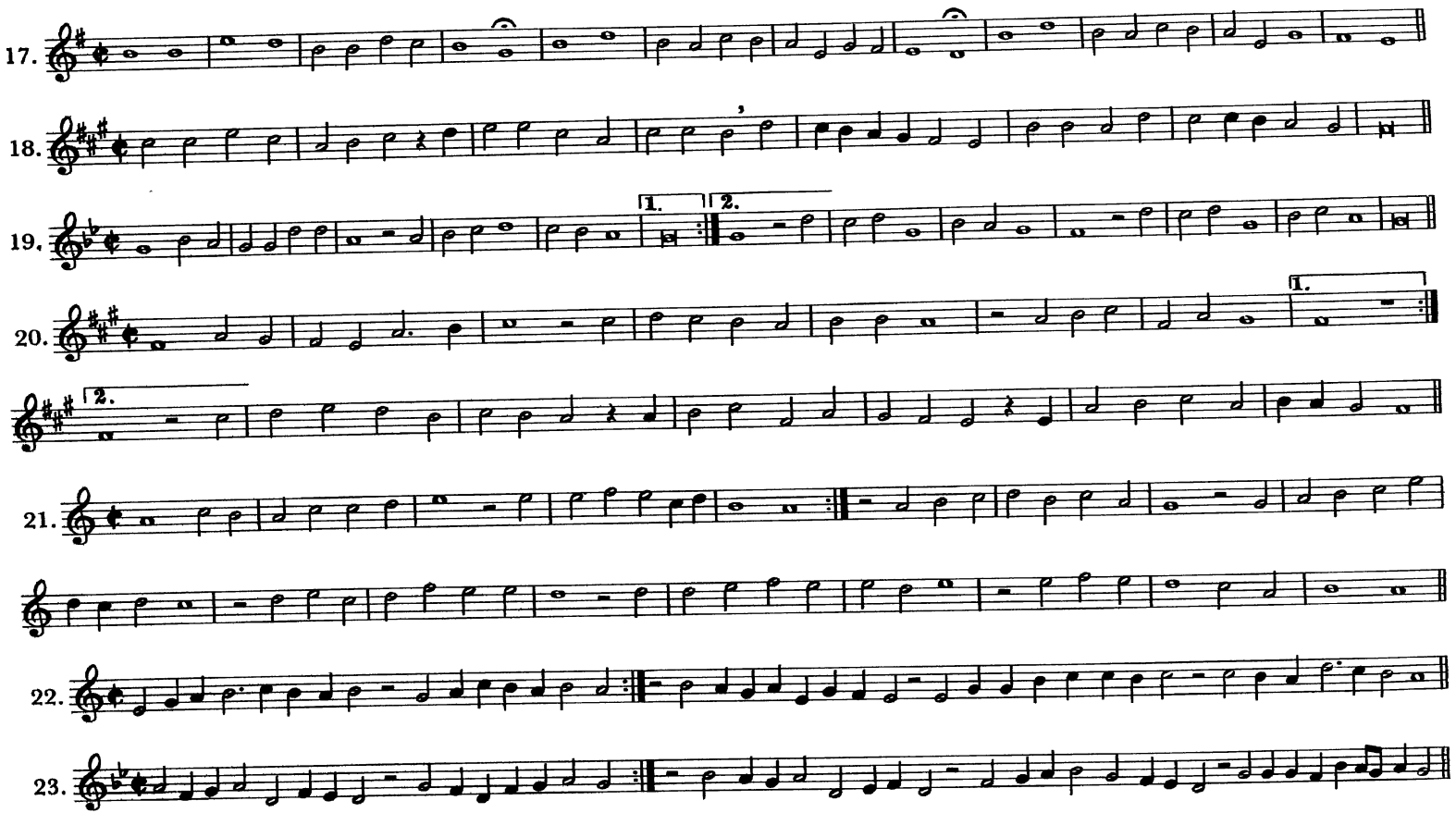
In this mode 'B-flat' is widely substituted for 'B-natural' due to the fact that the Dorian serves as dominant to the Mixolydian. It is this, the minor dominant, that most strongly distinguishes this mode from the Ionian. While the latter has the major seventh, the leading-tone, and only uses the minor seventh as an accidental, this is reversed in the Mixolydian where the V with the minor third and the VII as a pure major triad are characteristic. The following illustrations with the 'F-natural', 'B-flat', and the Dorian cadence are typical.

Ex. 211

Examine also the following harmonizations of Mixolydian melodies in *DK:* Nos. 146, 109, 23, 126, 181. No. 23, in spite of the Ionian signature, is nevertheless Mixolydian as emphasized by the modulation to the Dorian as dominant.

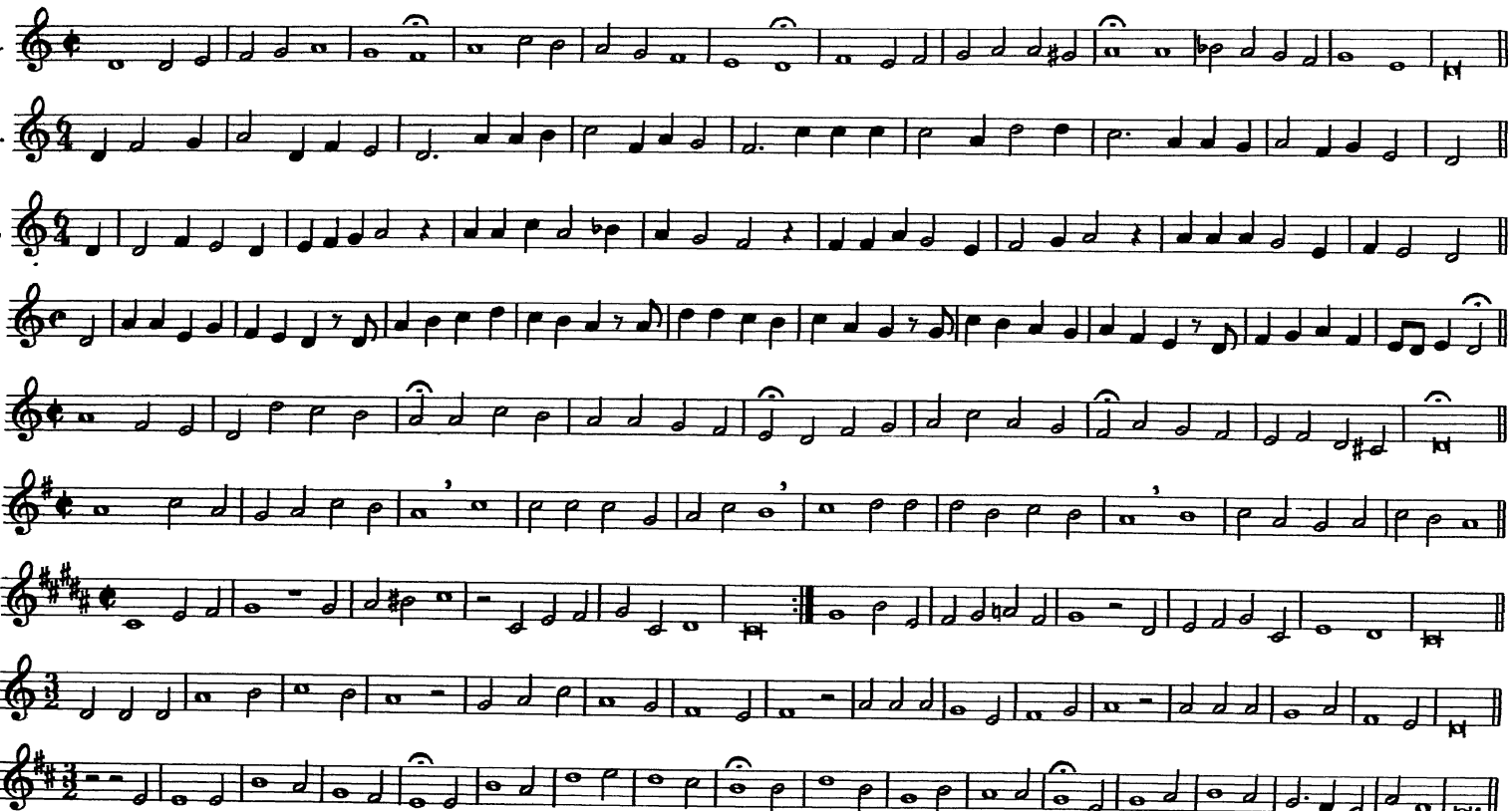
MELODIES FOR HARMONIZATION

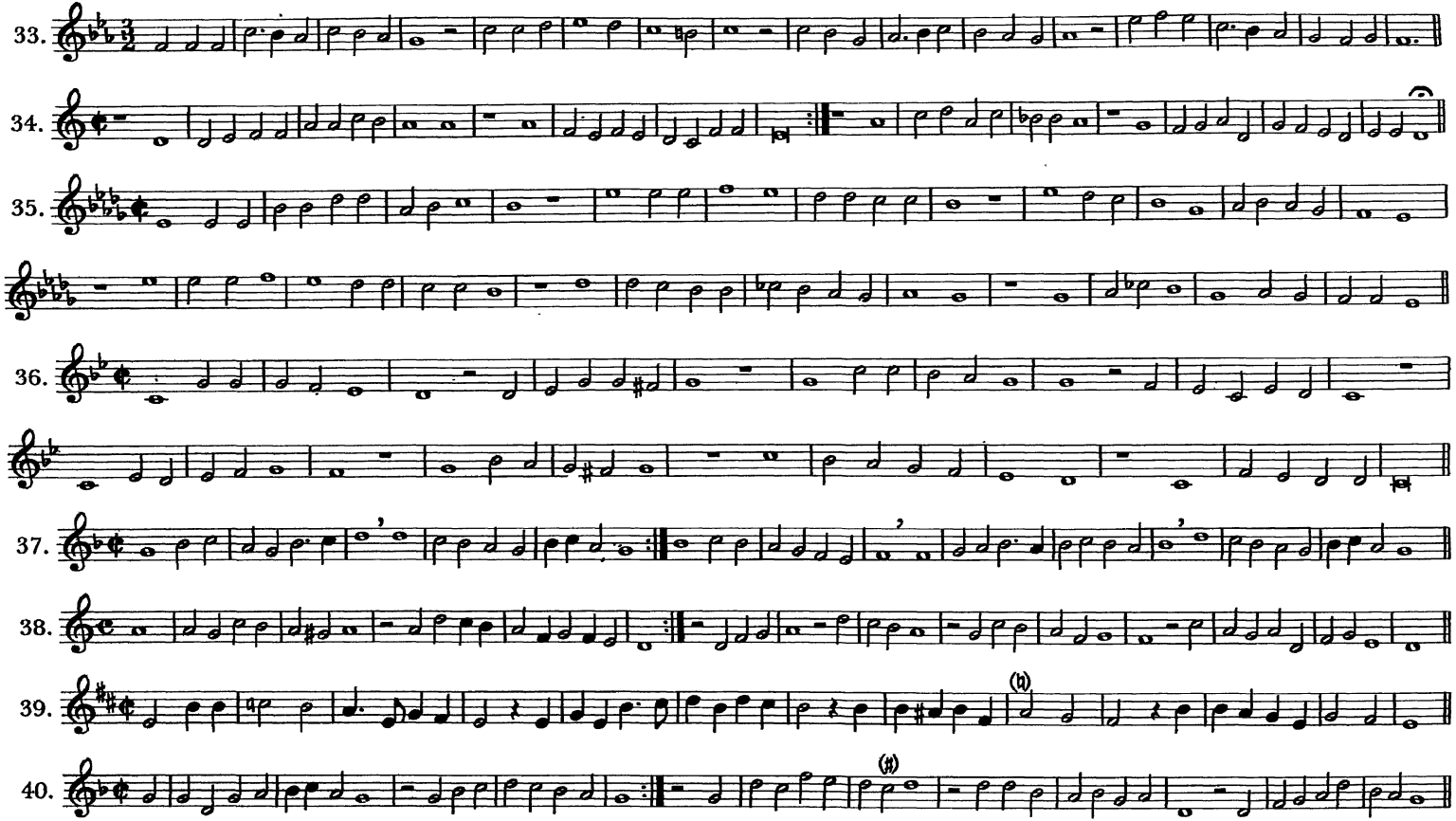
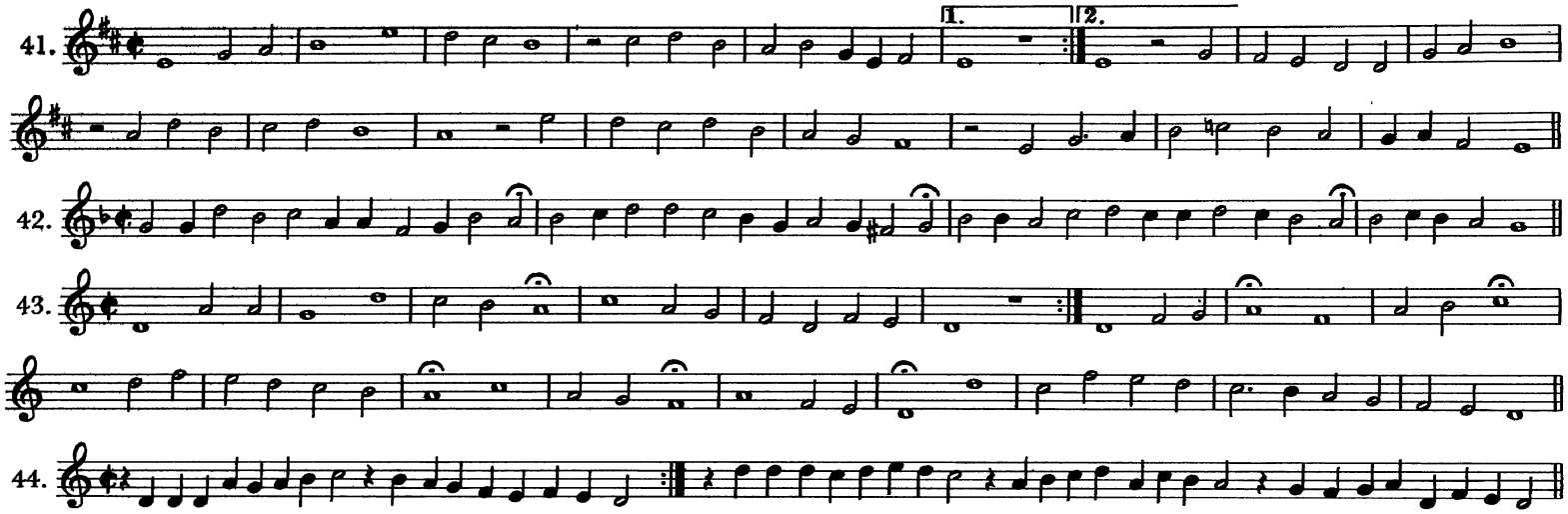
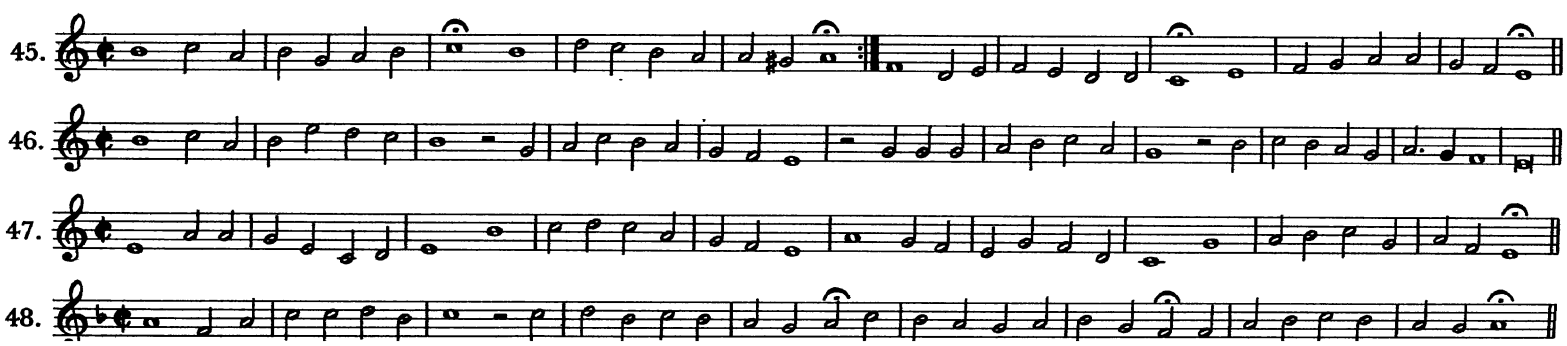
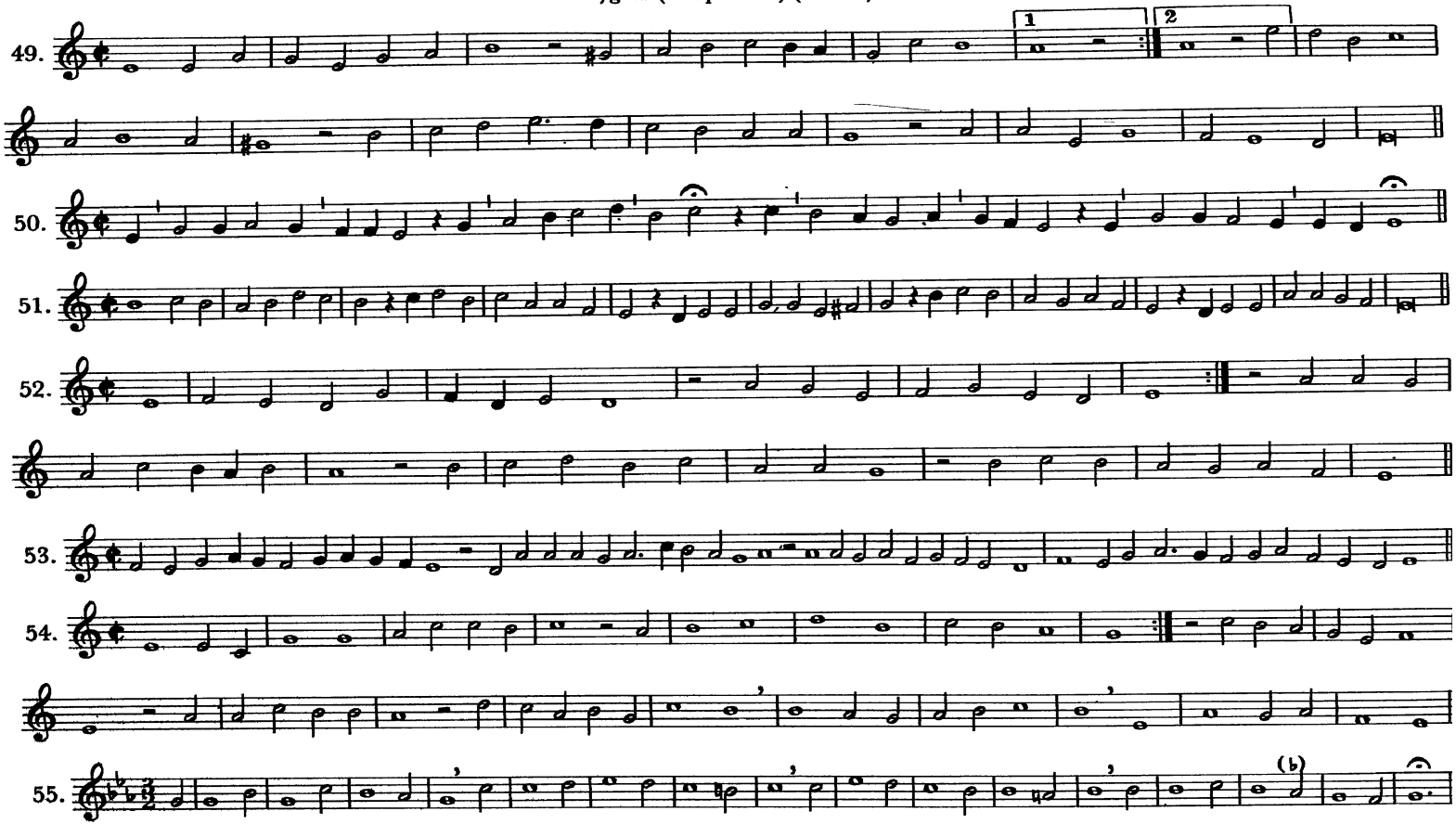
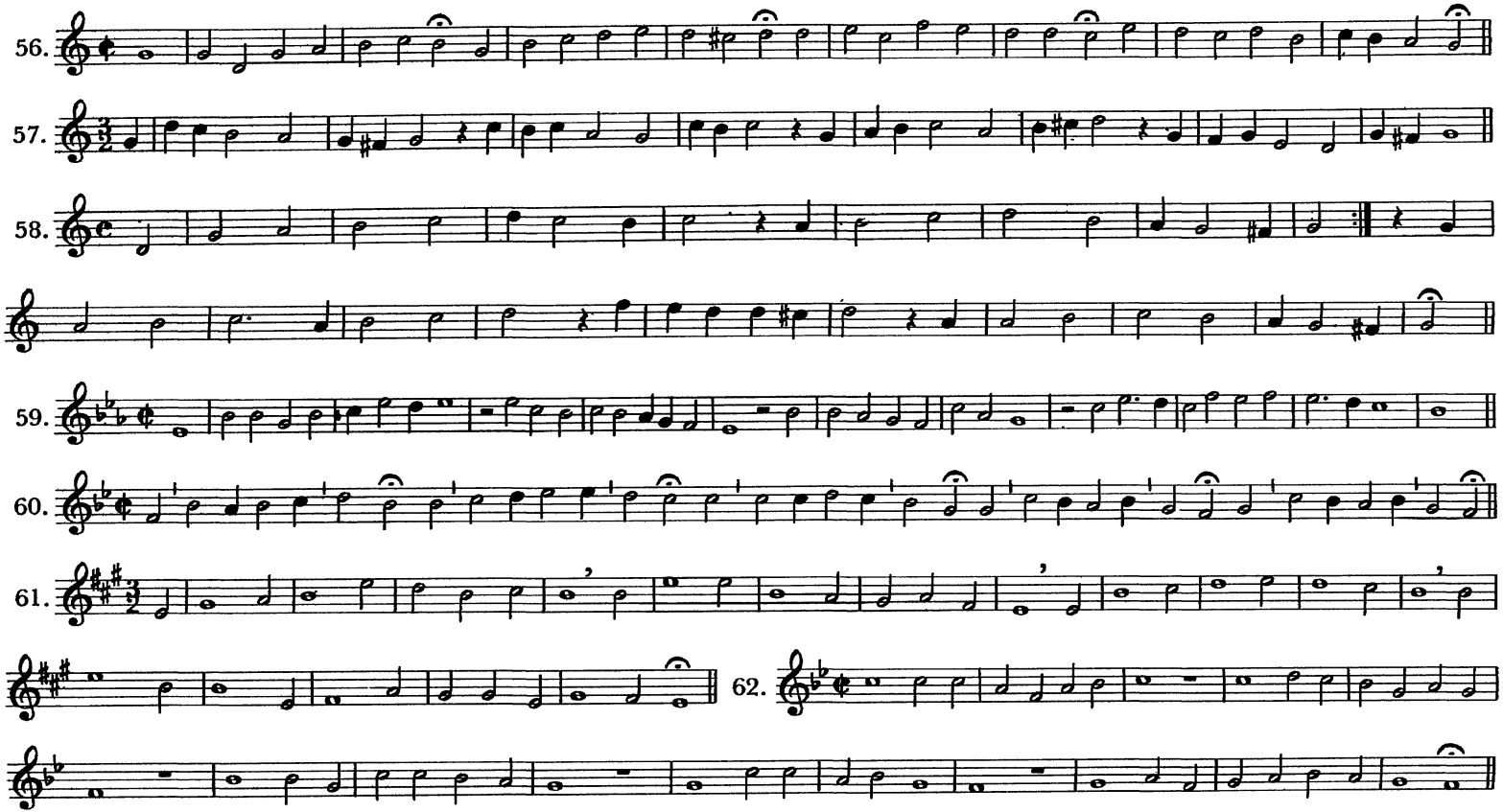
FOR CHAPTERS VI-X

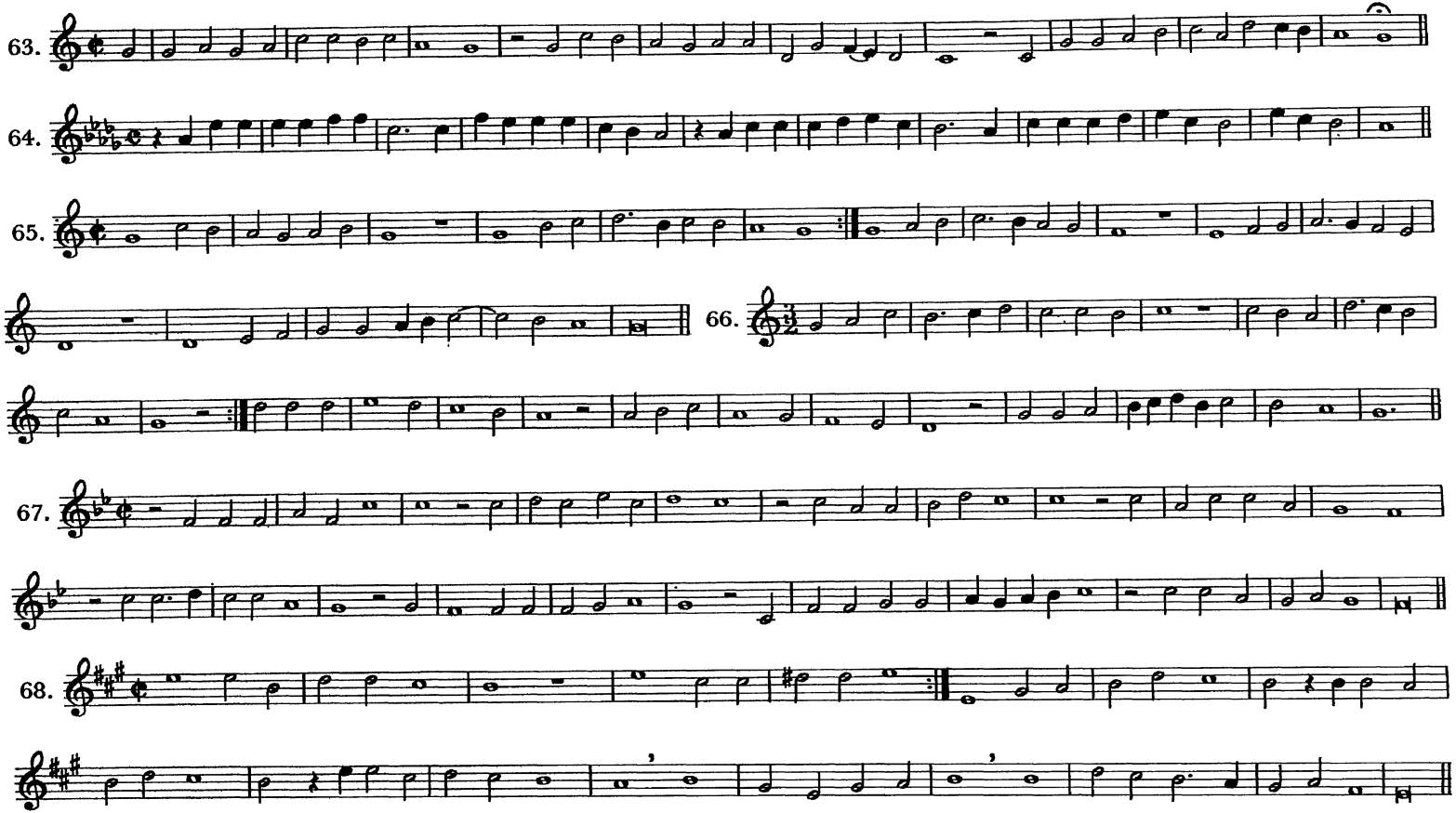
Ionian (Chapter VI)

Aeolian (Chapter VII)



17.
18.
19.
1.
2.
20.
1.
2.
21.
22.
23.


24.
25.
26.
27.
28.
29.
30.
31.
32.


33.
34.
35.
36.
37.
38.
39.
40.

Phrygian (Chapter IX)

49.
1
2
50.
51.
52.
53.
54.
55.

56.
57.
58.
59.
60.
61.
62.


63.
64.
65.
66.
67.
68.